CHAPTER 5

Response to Comments on the DEIS

CHAPTER 5

Comments on the Draft Environmental Impact Statement

The Bitterroot National Forest received 29 comments on the Draft Environmental Impact Statement. Following are the comments and the response to the comments:

Wilderness Watch

This letter constitutes the written comments from Wilderness Watch (WW) on the Draft Environmental Impact Statement (DEIS), concerning the Bass Lake Dam Reconstruction Project.

This letter is being written by Gordon Reese, a member of the Executive Committee of the Board of Directors for WW.

I have been the representative for our organization for the past three years that has been most active in this issue.

I would like to commend you, and your staff from the Stevensville District, for your excellent effort in public involvement in this project. I first attended a general meeting in May of '92. During the summer of '93, Bill Worf and I accompanied Leslie Weldon and Dixie Dies to Bass Lake Dam and received a thorough briefing of the proposed project. Doris Milner and I met with Leslie and Dave Silvieus on May 9, 1995, for an update on the project at which time we had an opportunity to share some concerns. I met with Dave a few weeks later to further clarify some of the major concerns. On the 5th and 6th of July, I had the opportunity to be part of a field trip to the dam site with Leslie, Dave and seven other USFS personnel, and Tom Ruffatto representing the Bass Lake Reservoir Company.

Your staff has done an outstanding job of involving me as a representative for WW and reviewing the work to be done and the plans as to how the work will be accomplished. You should really give Leslie and Dave an extra "pat on the back."

Rebuilding or repairing a dam within a designated wilderness represents a serious challenge to the managing agency. Consequently, WW, an organization dedicated to the proper stewardship of the Wilderness Preservation System and the Wild & Scenic River System, is very concerned with how the necessary repairs will be carried out; how the wilderness setting will be protected; and how the route up Bass Creek Valley will be treated. Dams within designated wilderness are one of the most challenging, nontypical, nonconforming aspects of wilderness and, therefore, projects of this nature result in heightened concern and increased scrutiny.

WW recognizes that the Bass Lake Dam and the road/trail that accesses it were constructed long before the Selway-Bitterroot Wilderness was designated. We realize the dam stores water for the benefit of Reservoir Company and, to some degree, for the population and resource in general. We realize that the safety of the dam is of major concern and that the work to maintain a safe structure must not be compromised. Because man-made structures such as dams and the routes that access them constitute such a nonconforming use in wilderness, it

is with great reluctance that WW has chosen to support Alternative 2 in your DEIS which is the proposal put forward by the permittee. It should be very clear that our support of this alternative is very site specific and, in no way, constitutes a general acceptance of heavy equipment in wilderness. Further, our support of Alternative 2 is based on the understanding that our position on some of the major issues concerning this project be incorporated in your final EIS. After much time, thought, and discussion our support for the plan to accomplish the work - Alternative 2 - can be attributed to two rather simple and straightforward reasons.

First, this alternative (2) is the **only** alternative presented in the DEIS that will accomplish all the work in a single season (projected to be late August through late September). This work will bring the dam into compliance with the Probably Maximum Flood scenario that is required of dams that are classified as High Hazard, as is the Bass Lake Dam. We believe that the impact on the wilderness resource in general, and specifically on the watershed and fish and the wildlife that inhabit this area, as well as wilderness visitors, will be **less** if this project is not spread over a longer period of time. The other alternative would have resulted in an on-going maintenance program continuing through the future life of the dam. This would be more impactive and, therefore, less desirable.

The second reason we support Alternative 2 is that it provides the best opportunity to achieve rehabilitation and resource damage mitigation/correction on the route into the site. WW, from the very beginning of this proposed project, has spoken out as to the potential that exists to achieve significant rehabilitation of the old road/trail/route that is the principal access to Bass Lake and Bass Lake Dam, as well as other lakes in the area.

The road into the dam site was constructed in 1951 and 1952. The road existed for the next 15 years in reasonably good condition for vehicle traffic to the lake, dam and, for a few years, to a sawmill at the lake. In the late 1960's, about three or four years after the 1964 Wilderness Act was passed, motorized use inside the Wilderness boundary was halted. The road was simply abandoned and used as a trail to the lake and dam.

Alternative 2 gives the best opportunity (because of the large-sized excavator with a "thumb") to accomplish the following types of rehab and naturalization along the route: a) rectify the water erosion problems that have developed in approximately eight (8) locations along the route where streams and runoff channel into the road/trail; b) construct, with the excavator, approximately 150 properly placed "rolling dip" type water diversion bars (these were identified as to actual location by Bob Oset, Wilderness Specialist, Bitterroot National Forest, on his return from the dam on July 6); c) use the bucket thumb of the excavator with a 32-foot reach to randomly place hundreds (200-300, at least) large rocks and boulders on the edge and surface of the road/trail to give a more trail-like appearance and to promote a narrowing of the route; d) use the same type of placement with the over 75 logs that presently exist along and above, or below the route to achieve additional naturalization; e) Bob Oset, on our July 5th and 6th trip to the project site, suggested that a USFS trail crew could/would be planned for work on the access road/trail/route the summer following this project. We believe this would be helpful; in fact, necessary to complete the rehab portion of this project. Removing trees and brush that did not recover after being driven over by the equipment would be a

large part of their work. Also, rock work and erosion work would need "fine tuning." This was an excellent suggestion and could insure a higher quality project.

We would hope it would be very clear that the above reasons and rationale for supporting Alternative 2 are very project specific and would probably not be present in other locations. Simply stated, we would like to see the work accomplished as quickly as possible with the least impact to the resource and the wilderness visitors, and use this one-time opportunity to achieve resource damage mitigation that will allow and promote long-range healing along the access route. We hope it would also be very clear that WW is supporting the rehab work with the intent that this route not be used to take motorized equipment in for future work on the dam.

The following areas of the DEIS appear to be inadequate or completely absent and need to be addressed in the EIS:

1. Discussion and plan for handling the public use (controlled access of trail during this project. The fact that the Charles Waters campground (USFS) is located adjacent to the Bass Creek trailhead and the number of people who use this route may present problems. This needs to be given adequate thought and preparation. We would contend that the public will not necessarily agree to loss of access, and probably won't understand the use of motorized equipment in the Wilderness.

Response:
The plans for controlling public use on the trail and near the dam and for informing users are discussed in Chapter 2, under Mitigation Measures, Recreation. The trail and the area around the construction site will be closed to public use through a Forest Supervisor's closure order, during critical times.

2. Discussion and plans for the route rehabilitation and naturalization. It was very disappointing to find no discussion nor any pictures of the route in the DEIS. Erosion damage is **major**. In numerous locations, the eroded surface is 10 to 15 feet wide (the width of the old road) and a number of these areas stretch for 200-300 feet. Plans need to be developed and written; staking and flagging needs to be completed; and standards (specifications) for the quantity and quality of this effort need to be finalized.

WW urges you to use the abilities, experience and expertise of Bob Oset. His involvement in the project, especially at the stage when the excavator and loader are exiting the valley and completing the rehab work, should be given major consideration. WW, if requested, would provide an observer/consultant at the rehab stage of this project to work with USFS personnel on the random placement of boulders and logs at no cost to the project.

Response:
The discussion about the trail rehabilitation plan is included in Chapter 2 under Mitigation Measures, Wilderness. The rehab plan will address specific needs, including drainage, and it is included in the Appendix.

3. Discussion and plans need to be developed for handling emergencies, especially those that are associated with helicopter use and the transportation

of diesel fuel. A worst case scenario must be developed; who should be contacted? What should be done? What materials would be needed and where should they be stored? If a helicopter crew has to cut loose a 200-gallon fuel tank, it won't be the end of the world, but complete plans need to be in place to deal with potential emergencies.

Response:
An air operations, safety, and materials handling plan, as discussed in Chapter 2, Mitigation Measures, has been developed and is included in the project file. The plan includes provisions for emergency responses to diesel fuel spills. Land and Water Consulting Inc. has been hired by the Reservoir Company and has provided a plan for petroleum spill prevention, emergency spill responses, and for spill rehabilitation (Project File).

4. Discussion and plans for the complete operation of the camp at the dam site. We would encourage the use of the concept to place the camp management under the supervision of the Bass Lake Reservoir Company and covered with a special-use permit. While the preliminary camp plan appears to well thought out, it does need fine tuning. We **strongly** encourage the USFS to insist that all the garbage and human feces, generated by the people at the dam site during the work project, be flown out. The fact that the helicopter will be transporting fuel at least every other day presents the opportunity to fly this material out at no added cost to the permittee. This project should serve as a model to the concept "Pack it in - Pack it out."

Response:
The Camp Management Plan is included in the project file, and it will be included in the authorization of the work. The plan will require the removal of garbage and human waste from the National Forest to an approved disposal site.

5. We believe that some additional thought should be given to the use of filter cloth when the coffer dam is constructed. The need for the coffer dam is to hold back the lake water when work on the inlet structure and pipe is undertaken. Filter cloth now appears to be standard treatment on any project that involves moving water. Why, when this project is inside the wilderness at the head of a stream, would filter cloth not be considered at least helpful, if not required?

Response:
The use of filter cloth has been considered. It would not be effective for controlling sediment at the cofferdam, since water will not be moving through the dam at that time. It would be effective in keeping sediment from moving downstream if applied downstream from the dam, at the outlet opening or at the parshall flume just below the outlet, and it will be used there. This has been added as a mitigation measure in Chapter 2.

6. Because of the unique nature of the rehab work on the route, after the work on the dam has been completed and the potential for bad weather, mechanical breakdowns or other problems impossible to predict or anticipate, WW would ask the USFS to require the permittee to post a performance bond to insure that the rehab work is completed.

Response:
A reclamation bond will be required to ensure all required rehabilitation work is completed.

7. Because this project will involve people who may have no previous experience in or around wilderness, we believe that the USFS should develop and carry out some type of educational sessions. These sessions will have as their objective to develop an awareness for wilderness and the unique challenges that exist in working and living inside the wilderness. Equipment operators, camp personnel, pipe welders, and helicopter crews should all be exposed to this type of training. People who are involved in this project should very clearly understand that in 1995, there are different expectations within the wilderness areas.

Response:
The use of a wilderness ranger for monitoring the work activities within the wilderness is discussed in Chapter 2, Monitoring Common to all Action Alternatives. The ranger's duties will also include an initial contact and discussion with the workers about wilderness ethics and awareness, followed by intermittent contacts and monitoring. These educational contacts have been added to Chapter 2.

In summary, this is a project inside the Selway-Bitterroot Wilderness that presents a number of special problems ---all of them challenging to the people who value and embrace the concept of our Wilderness Preservation System. The Bass Lake Dam Reconstruction Project creates a multitude of tradeoffs. If a complete and thorough analysis of all the problems and how to deal with them is completed and the people involved with the actual work are sensitive to wilderness values, we hope this project will actually result in a rasing of the future conditions of the resource.

Again, you should be aware that Leslie Weldon and her staff have done a great job involving our organization. Also, as I'm sure you are aware, Tom Ruffatto has put a huge amount of time and thought into this project. His willingness to discuss the plans and problems and listen to suggestions is outstanding.

WW is committed to proper management and stewardship of our wilderness areas. We look forward to continuing to work with you and your staff on this project and on future projects. We hope these comments are of value to you as you complete the Environmental Impact Statement.

Wilderness Watch

This letter is a follow-up to our phone conversation of a couple of weeks ago. You will recall I called you after having received your July 31 letter which explained two changes to the DEIS for the Bass Creek Dam Reconstruction Project. In your letter, you indicated these changes were not considered significant. Wilderness Watch would simply make the point that in a project of this nature within a designated wilderness, all aspects are significant.

The first change--the need for a later version of the pipe fusion machine--which will be transported via rubber-tired tractor and trailer would

not cause us added concern. The proposed rehab of the route by the excavator should erase any impacts by this additional use of the trail/road.

The second change--the need to store fuel in a 500 gallon holding tank at the project site--is from our perspective a change that has the potential to create serious problems.

The DEIS contained no particulars for the handling, transfer, and storage of fuel or any details of how the USFS and the permittee plan to deal with possible fuel spills or leaks. Consequently, my comments are of a broad basic nature rather than comments about your plans.

Please consider the following as what W.W. would consider to be basic procedures and plans.

1. The USFS should have one person at the project site who is solely responsible for all fuel transfers--from the tanks that are ferried in by helicopter--transferred to the storage tank and transferred to the equipment--all of this should be the responsibility of one person--who is trained to deal with fuel spills.

2. All fuel transfers should be documented in a fuel log book and initialed by the person responsible.

3. 1995 style materials for the cleanup of fuel spills should be stored at the project site.

4. Obviously, the storage tank at the project site will have a fuel containment dike with a liner that will handle a 500 gallon fuel spill.

Thank you for identifying these changes and giving us an opportunity to comment. We continue to be very interested and concerned with what happens at the Bass Creek Dam and the route up the Bass Creek valley.

Reponse:
Forest Service representatives will be responsible for administering the terms of the special use permit and cooperative agreement that will govern all aspects of the reconstruction permit. A wilderness ranger and a civil engineer will be on the ground to monitor the transportation, transfer, and storage of petroleum products. Details are included in the Air Operations, Safety, and Materials Handling Plan, in the Project File.

A temporary dike will be built around the fuel tanks. The interior of the impoundment will be lined with visquene, and the tanks will be supported above ground. Absorbent material will be stored on site. The Reservoir Company has contracted with a consultant for supplying emergency containment and clean up materials, and for responding to emergency spills.

Bitter Root Back Country Horsemen

The Bitter Root Back Country Horsemen Club would like to offer a few comments on the proposed dam reconstruction. The draft EIS proposes that Alternative #2 be utilized in the dam repair. This alternative allows for two pieces of heavy

equipment to be walked up an old road to the dam site, but all other materials, equipment, and personnel would be brought by helicopter.

Because this is a Wilderness Area, we would prefer that no work be done on the dam and especially that the old road not be widened to allow passage of heavy equipment to the dam site. However, realistically, we agree that the dam must be repaired, and repaired correctly. Without the heavy equipment it would be very difficult, and cost prohibitive to make the proper repairs, therefore, we support alternative #2, with the stipulations discussed below.

As mentioned, we would prefer that no equipment be brought up the old road. Most of this road is currently not accessible to motorized vehicles, so our main concern is that walking the equipment up the road may again allow such access. Your alternative #2 states that when the equipment is walked back out following completion of the project, the road will be turned into a trail so that motorized vehicles will not have access. Therefore, following completion of the work, if indeed the road is returned to a standard Forest Service trail, with proper slope, treadwidth, waterbars, replanting, etc., and all motorized vehicles including snowmobiles can be excluded, then our club will support alternative #2 in this Wilderness Area.

Response:
Motorized use on the Bass Creek trail is currently prohibited by a Forest Supervisor's Order, and this will not change with the selected alternative. The goals for the rehabilitation of the trail are included in Chapter 2.

Bitterroot Conservation District

The Bitterroot Conservation District represents Water and Ag Conservation in the Bitterroot Valley. The Bass Lake Reservoir Company's proposed Reservoir Reconstruction Alternative B (use of heavy equipment on existing road) will conserve energy and will cut time that construction will take.

High mountain reservoirs store water that maintain later season water flows and water table. The use of heavy equipment for such a short time will have little impact on wildlife and wilderness visitors. The Bitterroot Conservation District is in favor of water storage and the reconstruction of water storage reservoirs.

Response:
These comments were considered in preparing the FEIS.

Bass Lake Reservoir Company

Bass Lake Reservoir Company appreciated the opportunity to comment on the Bass Lake Dam Reconstruction Draft Environmental Impact Statement. The company has cooperated fully in this EIS process. An EA analysis is sufficient for a reconstruction project by an entity which holds a statutory right-of-way from the United States when there is no significant change to the size of the existing structures and appurtenances. The Company's position is that an EIS is the process that provides for the most complete analysis of the project and for public input. The Company has cooperated fully in this process even though

it was not required to do so, and even though the cost to the company in terms of time and money is significant.
The Company's proposed use of the Company's existing access to the Company's reservoir is what is reasonable and necessary for the Company to complete the reconstruction project to put the structure in compliance with dam safety and operation laws. Access activity will include the movement to and from Bass Lake Reservoir of only those motorized vehicles or equipment necessary for the repair, renovation, maintenance and operation of Bass Lake Dam. Ingress will be accomplished without repair, maintenance or modification to the Company's existing road except as is necessary to put the road in a condition to allow the Company to access the Company's reservoir for the reconstruction project.

The road will not need to be widened beyond the width that has been historically used by the Company and other inholders that have used the road for access and use of the inholdings. Egress will be accomplished in the same manner. The Company has voluntarily agreed to participate with the Forest Service in an erosion control project on the road which will involve the digging of effective water bars by the use of the heavy equipment which will be present on the road as a result of the Company's work at the reservoir. The Company has agreed to the erosion control work as designated by a Forest Service representative, with the understanding that the Forest Service is paying for all additional costs involved.

Helicopters will be used to transport materials that would be damaged if taken in on the ground or where the use of helicopters is the most cost effective method of transport. For the purpose of reconstruction in 1995 at Bass Lake Reservoir, no vehicle or motorized equipment shall be moved to or from Bass Lake Reservoir prior to July 30, 1995, or after November 1, 1995, without notifying the Stevensville Ranger District.

Repair of the existing road is expected to consist of the following:

1. Cutting trees, alders or limbs which would otherwise prevent the safe passage of the operator or equipment.

2 Removal of large rocks which would damage or impede the passage of vehicles or equipment.

3. Collecting and transferring loose material from the edge of the road to spots where the road needs to be leveled up to permit passage without risk of equipment or vehicles overturning.

4. In the alternative, sloping spots could be leveled up by removing material on the high side, including dynamiting where necessary.

Motorized equipment will consist of a tracked excavator and rubber tired end loader. Other equipment will consist of welders, compressors, generators, compactors and miscellaneous small tools and equipment. Items weighing less than 2000 pounds will be airlifted to the site by helicopter. Only items which cannot be airlifted economically will be moved over the access road.

Motorized equipment and all other equipment will be moved to Bass Lake Reservoir at the start of renovation and from Bass Lake Reservoir on completion of renovation.

It is anticipated that a Bell 240 or comparable helicopter will be used whenever practicable and economically justified during the renovation period. The helicopter will be used to ferry work crews, materials and supplies on an as needed basis. The helicopter will be used to move material, equipment and supplies during the renovation phase, consisting of:

1. Mobilization to reservoir

2. Rip-rap and pipe lining.

3. Pouring the concrete footing for the inlet works

4. Demobilization on completion of the project

5. On other occasions when materials, equipment or supplies need to be moved to the Reservoir site and the helicopter is the most cost effective method

No detailed plan on the road phase of the reconstruction project was submitted to the Forest Service in time for the printing of the Draft EIS. The Company supports the selection of Alternative B for all other aspects of the project and plans to continue working in a cooperative manner with the Forest Service in the reconstruction project.

Response:
These comments were considered in the completion of the FEIS

Carl Baldwin-phone call

I support Alternative 2

Wilderness Resource Center
Alliance for the Wild Rockies

The following constitute the comments of the Wilderness Resource Center (WRC) and the Alliance for the Wild Rockies (AWR) on the Draft Environmental Impact Statement (DEIS) for the reconstruction of the Bass Lake Dam. WRC is a national grassroots membership organization composed of citizens concerned with the stewardship of public lands both State and Federal in the northern Rocky Mountain Bioregion.

The DEIS for the reconstruction of the Bass Lake Dam is an important document which should be forthright and precise in analysis of the environmental impacts surrounding the proposed project. Since this project takes place in a federally protected wilderness it is incumbent upon the Forest Service to present the proposal within the guidelines of what is required by law, what is being proposed for the comfort and economic benefit of the permittee, and what is being done for wilderness purposes. However, it seems as if throughout, the document is either purposefully vague or deceiving as it defines the parameters guiding the process and procedures for the entire proposed project.
A major failure of the DEIS is the lack of documentation of what precisely is required by the Federal Dam Safety regulations. At first reading the DEIS might lead you to believe that everything proposed within the reconstruction

process is required by the Federal Dam Safety Regulations. A closer reading reveals that part of the project proposal is for work either requested by the Forest Service or the permittees and probably not necessary to bring the dam into compliance with safety regulations at all.

On page one line eight it is stated that "Compliance with federal dam safety requirements **require the use of heavy motorized equipment**..." (emphasis added) It is hardly believable that the dam safety requirements would stipulate the type or size of equipment necessary for specific work projects. This confusion is continued on page Ch 1 - 2 under the description of the proposed action where it is stated that, "The work listed below is required to meet federal compliance standards." After reading the DEIS it is apparent that only part of the project proposed is necessary to meet the dam safety regulations. For example either the excavation of the inlet area and replacement and extension of the inlet pipes and their encasement in concrete is not required by the dam safety regulations or Alternative C is an illegal proposal. Further, the different Alternatives are alternately referenced by numbers and then by letters. Consistency and accurate documentation are important components of an EIS and in this case these components are not evident. In this response it is assumed that Alt. 1 and Alt. A are synonymous as are Alt 2 and Alt. B, and Alt. 3 and Alt. C, and Alt. 4 and Alt. D. Consistency and accurate documentation are important components of an EIS and in this case these components are not evident.

Response:
The replacement of the concrete inlet pipes and structure is work that is required for the dam to meet safety standards, as documented by the Corps of Engineers report (April, 1980) and by Druyvestein, Johnson, and Anderson (July 1995). The existing inlet structure can be made safely operable for another 20-25 years with the insertion of a steel pipe liner, and the implementation of the concrete maintenance program described in Alternatives 3 and 4 in Chapter 2. It has been determined that the replacement of the inlet structure requires the use of the heavy equipment listed in Chapter 1.

The Alternatives considered in detail are now consistently referred to as Alternatives 1-4 in the FEIS.

The purpose and need for the proposed action is slightly overstated in the beginning. The purpose and need should be quite simply to assure that the water impoundment facility at Bass Lake does not present a safety hazard as defined by Federal Dam Inspection Act of 1972 (P.L. 62-327), and the Federal Guidelines for Dam Safety of 1979. The primary purpose and need for this document is to examine the environmental impacts for various means of accomplishing that assurance. This can be accomplished through various alternatives including a No Action alternative and an Action alternative which proposes to build a road access to the site for all equipment and supplies.

Ch 1-2, IV. PROPOSED ACTION

As stated this is a proposal submitted by the permittee and none of the alternatives will make any changes in water storage capacity, surface level, or historic water flows. At least one alternative should have been examined which does address changes in water storage capacity. A no action alternative should have been examined which explored whether purchasing some acre feet of water

rights might be the easiest and cheapest means of bringing this dam into compliance. The question should have been posed as to how often is the entire amount water stored, above the natural capacity of the lake, used for irrigation purposes? Would the permittees be willing to sell any portion of their water rights to comply with the dam safety regulations?

Response:
An alternative (D) was considered that would reduce the capacity of the reservoir. This alternative was not considered in detail, because part of the purpose and need for action, as stated in Chapter 1, is to maintain irrigation water to dependent ranchers and agricultural lands. Such an alternative is therefore outside the scope of this analysis. A reservoir with reduced capacity would still be required to meet dam safety laws.

1 Description of Work

Is all of the work listed for renovation (a., b., c.) required? Is the excavation of the inlet area and replacing the current inlet pipes with 20 foot smooth steel pipe, wyed as previously and encased in concrete necessary for compliance. A close reading of the DEIS reveals that this work is not necessary. Does the concrete need to be mixed off site and flown to the area of use. Cement could be hauled in with pack animals and mixed on site.

When strengthening the existing spillway and plans require removal of the masonry stone wall, does that mean that regulations call for removal of the wall? Renovation of the log boom may be part of the proposal, but it could also be accomplished under the annual maintenance plan using non-motorized equipment. Stating these portions of the project as requirements is deceiving and only what is necessary should be analyzed.

Response:
The replacement of the inlet structure is work that is required for the dam to meet safety standards. The existing inlet structure can be made safely operable for another 20-25 years with the implementation of the concrete maintenance program described in Alternatives 3 and 4 in Chapter 2. An alternative (A) was considered that would require concrete to be carried in with pack animals. This alternative was eliminated from detailed consideration for the reasons listed in Chapter 2. Alternative 3 would complete the log boom work with primitive tools. The alternative methods for completing aspects of the repair work are not specified by regulation, but have been determined feasible by engineers that have studied the deficiencies of the dam.

2. Equipment Proposed

It is found in the DEIS that neither the Caterpillar D6D Tracked Loader or the Caterpillar 225B Excavator/Back-hoe are required or even necessary to accomplish the minimum necessary work to bring the dam into compliance. The use of the helicopters needs to be justified based on the required work. That has not been done. The Hughes 500 is certainly not necessary because there is no need to transport personnel and small equipment to the site when there are Wilderness friendly alternatives such as hiking and pack stock. The test for each piece of equipment must be that it is the minimum tool necessary for accomplishing the minimum work necessary to bring the dam into compliance. Most of the equipment listed in the proposal probably would not pass this test.

Response:
Engineers from the Forest Service, Corps of Engineers, State of Montana, and consulting firms have reviewed the dam and determined the repair needs. An alternative (3) that did not utilize helicopters for transporting personnel was considered. The methods and equipment proposed in Alternative 2 are the minimum management actions which accomplish the objectives with the least impact on the physical, biological, and social characteristics of wilderness (minimum tool definition, Selway-Bitterroot Wilderness, General Management Direction, 1992, Appendix G-1), and they are responsive to the Region One direction on the management of wilderness dams (FSM 2326.1, June 3, 1992). In the case of Alternative 2, the objective is to complete all the necessary repair work in one season and to minimize the time spent on the reconstruction. Section M, Land Occupancy, in the Selway-Bitterroot Wilderness General Management Direction provides analysis direction for the use of motorized equipment for the reconstruction and heavy maintenance of dams.

Chapter 2 Alternatives

A minimum of two alternatives are required; a no action alternative and the proposed action alternative. The public should know specifically what is required to bring this water storage facility into compliance at 3600 acre feet, action alternatives, and we should also know the effects of the no action alternative which may require lowering the water level to bring the facility into compliance with dam safety regs. Various action alternatives are needed to describe the environmental impacts of alternative methods of achieving compliance with Federal Dam Safety regulations.

Response:
The activities described under the Proposed Action in Chapter 1 are needed to bring the dam into compliance with the law. An alternative that considered the lowering of the water level was considered in Chapter 2. The lowering of the water levels would be considered an action. The effects of 3 action alternatives are disclosed. The effects of no action are also included in Chapter 4.

III Environmental Issues

1. Preserving Wilderness Values

It is implied that consideration has been given to the feasibility of using primitive/historical tools instead of motorized equipment. While it is appropriate that this analysis be taken, the real issue is not whether primitive tools can be used, although primitive non-motorized tools were used in the original construction, the issue to look at is what is the minimum tool that can be used in every instance and phase of the project to accomplish the minimum necessary to bring the dam into compliance with the regulations. The chosen alternative should show a mix of primitive tools, non-motorized equipment and possibly some motorized tools. This might include horses and mules to pack in the personnel, supplies and smaller equipment while using a helicopter to haul in heavier equipment needed to dig rock and compact the fill on the dam. #6. almost reaches this point when the question is asked, "What is the minimum tool necessary to complete the work?" A minimum tool alternative must be the preferred alternative but that does not rule out the use of the

helicopters, or even heavy equipment as long as they can be shown to be the minimum to bring the facility into compliance.

Response:
Alternative A (Chapter 2, Alternatives Considered but not in Detail), fully considered the use of primitive and historic tools to accomplish the project. All alternatives use the minimum tool, as described in the Selway-Bitterroot Wilderness General Management Direction, Forest Plan Amendment #7, January 31, 1992, for accomplishing the objectives of the alternative. Alternative 3 emphasizes the utilization of more primitive tools to accomplish the reconstruction work within a longer period of time than Alternatives 2 and 4. Chapter 4 discusses how the use of primitive tools address issues and goals associated with the proposed action and the purpose and need for action.

8. Economics

While we all appreciate that it would be nice to use the most inexpensive means possible to complete the work required, that is not necessarily the driving force on projects taking place within Wilderness. It may be more expensive to do something by hand then by using power tools, but when the effects on the wilderness are greater with the less expensive method then the more expensive least impactive method should be implemented.

Response:
Costs of the alternatives were an issue, and they were considered along with other social and environmental issues, as directed by the Region One Wilderness Dams Policy. Costs were not the driving force in the analysis or in the selection of an alternative.

IV. ALTERNATIVES CONSIDERED BUT NOT GIVEN DETAILED STUDY

1. Alternative A-

This alternative has some very good parts to it and should at least be partially incorporated into the preferred alternative. It is not a good analysis if in fact the objective was to minimize conflicts with wilderness objectives and values. The final preferred alternative **must** minimize conflicts with wilderness objectives and values to the highest degree possible while completing the required work. This alternative probably would not accomplish that objective due to excessive length of time and the impacts caused by the logistics of such the activities as stated. It should be documented however how the equipment and duration figures were arrived at. It seems very excessive that it would take nearly a full year to complete this operation using four teams of draft horses. The camp logistics seem excessive as presented. Pack strings could make a round trip very easily in one day so that there would be no reason to keep them in the camp overnight and both human and animal waste could be hauled out on the return trips. The beauty of analyzing this alternative is that it shows that the job could be completed using primarily non-motorized equipment.

Response:
Duration estimates and the process for determining them for Alternative A are included in the project file.

2. Alternative B

The maximum development alternative has been appropriately discarded. Working within the guiding principles of the Wilderness Act, due to the dam location within the Selway Bitterroot Wilderness, it has been determined that there are many alternatives that would have less impact on the Wilderness than maximum road development and access.

3. Alternative C - Same as the Proposed Action, but with all helicopter transport

This is an important alternative analysis although it is appropriate to delete it from consideration. The one finding from this alternative that is extremely important is that "**it is possible to achieve the purpose and need for action without the use of the heavy excavation equipment that is proposed.**"

4 Alternative D-Reduce the Elevation of the Spillway.

While it might seem appropriate to dismiss this alternative it is not, at least not without further documentation. To state that it would not meet the Purpose and Need for Action because it would not maintain irrigation water to dependent ranchers and agricultural lands is to presume that the Purpose and Need for Action is appropriate. This alternative should be analyzed more deeply. It needs to be quantitatively stated exactly how much irrigation would have to be forgone to implement this action. It should also be documented that the necessary water rights could not be purchased. At the public meetings sponsored by the Forest Service the permittees stated that in many years they did not use all of their allocation of water. Perhaps the purchase of these rights would be the cheapest and least impactive means of bringing this facility into safety compliance.

Response:
An important part of the purpose and need for action is the maintenance of the irrigation water for dependent agricultural lands. The scope of the analysis does not include increasing or decreasing the 3600 acre feet of water that is legally owned by the reservoir company under Montana state law. The use of the adjudicated water is beyond the scope of the purpose and need identified in Chapter 1. Additional and separate issues would be associated with the purchase of water rights or changes in permitted use of the reservoir. The company has not proposed any change in storage capacity or use for the water. If storage capacity were reduced, the dam would still be required to meet safety requirements under Federal law.

V Alternatives considered in Detail

1. Features common to all Action Alternatives

This section provides some very important findings. It is stated that, "All alternatives would meet the safety and construction requirements established by the Federal Guidelines for Dam Safety, and by the Forest Service".

4 Alternative Descriptions

Alternative A - No Action

The no action alternative should include the cost of buying enough of the water rights to make the no action a legal possibility.

Response:
As stated earlier, the buying of water rights is outside the scope of the analysis and would be considered a separate action due to the associated issues and effects, both social and environmental.

Alternative B - Proposed Action

This alternative should be discarded because it includes work which is not necessary to bring the dam into compliance with the Federal Dam Safety Regulations. This extra work, et. the inlet pipe and concrete casings, requires equipment which will have significant impact on the wilderness. While it does meet the purpose and need of the DEIS, meeting the stated purpose and need is not what this project is all about. The appropriate purpose and need is to bring the water storage facility into compliance with the Federal Dam Safety Regulations. For anything beyond that it must be shown that the work is beneficial for Wilderness purposes. As other alternatives show, this other work simply does not need to be done at this time. The Bell 204 is appropriate to haul all of the equipment and supplies which cannot be transported by pack string. The Hughes 500 is not necessary at all because personnel can hike or ride stock into the work site and the smaller supplies can be taken in on pack string. Some of the other motorized equipment is probably unnecessary such as the rock drill and the chain saw because the work they would be needed for can be done and has been done in the past by non-motorized hand tools.

Response:
Alternative 2 is appropriate because it is responsive to the issues and to the purpose and need for action, and it is the the only alternative that completes all the required work in one season. The replacement of the inlet structure is required to meet safety requirements, but it can be delayed for 20-25 years with proper maintenance every 3-5 years. This alternative uses less primitive methods than Alternative 3, because the objective is to concentrate and minimize the disturbance time.
Discussing the trail as a "road" is misleading. At the Wilderness boundary any semblance which the trail has to a road is lost. Discussing the trail as a road is deceptive. There are 40+ year old trees which would need to be cut. With this alternative significant impact would be inflicted upon the Wilderness by taking the heavy equipment proposed to the dam site on the trail.

Response:
The road is well vegetated, especially along the lower two thirds of the canyon, but the road prism is evident along it's entire length, except for a 200 foot section that has been covered with a rock slide. Anticipated impacts to the trail and the vegetation growing in the trail and along the old road are described in Chapter 4.

Alternative C. - Emphasize minimum tool and fly in lighter construction equipment

This alternative should most closely approximate the final chosen alternative. The minimum tool should be required at all times. Under this alternative the

trail would be saved. The work would be completed on time and the impact on the Wilderness would be the least of any of the action alternatives which would accomplish the job in one season.

The fact that a concrete maintenance program would be implemented every 3-5 years is of insignificance because of the minimum impact to the Wilderness. In Wilderness it is appropriate that the workers would hike in or ride in on stock for their work hitches. It only takes a few hours to ride in to the work site. While a heavy lift helicopter may be necessary to haul in the heavy equipment, at least one if not both of the other helicopters could be eliminated as much of the work would be done by the bigger craft.

Access to the site is presented appropriately in this alternative as is the camp and storage area section. The increased duration projected for this alternative should be documented but it seems to be reasonable in light of the heavy impact alternatives.

Alternative D - Walk in lighter construction equipment

The difference between this alternative and Alt C need to be more closely documented. It has been established that the dump truck is not necessary and could be replaced by the bobcats if that is the minimum tool. It is not explained why packstock would not be used in this alternative. It would seem that they are the minimum tool for much of the hauling of supplies and light equipment and could eliminate much of the helicopter traffic. In fact it is later stated that helicopters would be used to haul only the equipment that is not transportable by packstock. This needs to be clarified. The duration projected for this alternative begs the question of why this alternative would take less time than Alternative C. This must be explained.

Response:
The use of more primitive tools such as packstock is included in Alternative 3. Alternatives were developed to clearly compare environmental impacts, to define issues, and to provide the basis for choice among options. Alternative 4 would not rely on packstock to transport lighter equipment, as would Alternative 3. This has been clarified in the FEIS.

Table 2.1 - Comparison of alternatives

Once again the Forest Service is not being truthful in its analysis. The stated duration of effects to the Wilderness for the permittee proposal is 25 days, Alt C is 50 days and Alt. D is 35 days. Actually the duration of the effects to the Wilderness for the permittee proposal should be estimated in years. It has been over 40 years since the road was built and the effect is still visible today. The sloughing for the 1200 feet is evident and the wide trail before the Wilderness boundary is quite obvious. If you are just talking about the duration of the project, the difference between 25, 35, or 50 days is insignificant.

Response:
The estimated duration of effects to wilderness and recreation resources is during the period of implementation. Chapter 4 discusses the estimated duration of the effects to these and other resources, beyond the period of

implementation, and the direct, indirect, and cumulative effects of the activities.

The effect on fisheries while not likely to have an adverse effect on bull trout or westslope cutthroat in alternative B needs to be carefully monitored. An alternative which could guarantee no adverse effect should be weighed very favorably.

Response:
The discussion of effects to bull trout and cutthroat trout are included in Chapter 4 and in the Biological Evaluation. These effects are considered in making the decision. The use of Best Management Practices for soil and water conservation, and trail drainage improvements will maintain or improve fish habitat.

Economics

The economic comparisons are deceptive or confusing at least in their comparisons. Some items are listed in one alternative and not the others. It needs to be explained why the pipe costs are the same in all of the alternatives yet much less pipe would be used in Alt D and C because no inlet pipe would be used. Spillway widening and Rip rap/filling are listed in Alt C & D at over $20,000 yet not listed in the proposed alternative at all. While Alt B includes Mobilization at $10,000, it does not list a cost for Demobilization which in Alt C is over $29,000 and Alt D is over $18,000. This discrepancy needs to be examined and explained. In reality the cost difference is insignificant among the alternatives because it must be amortized out over 20 to 50 years. The cost of an alternative where the water rights would be bought should also be included. These economic values must be more clearly stated.

Response:
The cost categories have been made consistent between alternatives in the FEIS. The cost of purchasing water rights is not included, because it is not within the scope of the analysis.

Chapter 3, Affected Environment

While it states that the lake is approximately 100 acres and 3600 acre feet it does not give the number of acre feet which the permittees are entitled to use or how much they normally use. This should be made clear. It states that one of the reasons for the classification of the dam as high hazard is because of the Forest Service campground at the mouth of the canyon. What would be the affect of moving the campground to a different location where it would not be in jeopardy from a dam break?

Response:
The reservoir company has water rights on the 3600 acre feet of water. Increases or reductions in this amount is not within the scope of the analysis. Other residences and public facilities below the campground contribute to the hazard rating. The hazard rating increases the urgency of the repair work, but the work is needed for continued safe operation of the dam and for resource protection.

In conclusion it is obvious that the proposed alternative cannot be accepted. It proposes work which is not necessary to bring the dam into compliance with the federal dam safety regulations and which would have long lasting negative impacts on the Wilderness resource. An alternative which uses the minimum tool, but not necessarily non-motorized, for each and every aspect of the project must be developed. No road building should be allowed. The economic impacts are of less importance than the impacts to the Wilderness and in any event are inconsequently different. However through careful analysis the costs of a minimum impact alternative should be nearly equal to or even less than the proposed alternative. An alternative which provides for a concrete maintenance program for the next quarter century is entirely appropriate. Time has a way of providing technology that might allow for the proposed new intake pipe in a more Wilderness friendly manner than that proposed by the permittees. It is clear that any facility must meet all safety requirements. It is also clear that this can be accomplished in a fashion which will have a minimum impact on the Wilderness resource.

Response:
As described in the FEIS, Alternative 2, the selected alternative, completes all needed repair work for compliance with all regulations in one operating season. Alternative 2 uses the minimum tools necessary for meeting this objective. No road construction is proposed in any alternative. Alternatives 2 and 4 provide for approximately 200 feet of rock slide removal on the existing road, which is administered as a trail. Large rocks and vegetation on the remainder of the trail will be cleared only where needed to provide for safe equipment movement. An adequate range of alternatives is presented in the EIS, based on the issues and the scope of the analysis.

It is important that the purpose and need be appropriately indicated and a more readable document be compiled. This project has the potential to set precedent for other similar projects not only in the Selway Bitterroot Wilderness but also for other projects in Wildernesses across the country. The Forest Service should look at this as an opportunity to prove their worthiness as Wilderness stewards.

Response:
The purpose and need for action has been reviewed. The purpose and need for the reconstruction is to bring the dam to a safe condition that will protect life and property, comply with federal dam safety standards, and provide and maintain irrigation water to dependent ranchers and agricultural lands. Other background information is included in the Purpose and Need for Action section in Chapter 1, to support the above statement. The Final EIS has been improved and supplemented to address concerns raised by commentators on the Draft EIS.

Bitterroot Stockgrowers

On behalf of the Bitter Root Stockgrowers Assn. I would like to respond to the EIS for the proposed Bass Dam Reconstruction Project. After reviewing the EIS it seems Alternative B is the most sensible route to get the job accomplished. It is completely feasible to drive in heavy equipment without detriment to the surroundings. I have traveled the trail and can see that machinery could get to the dam site and repair the problem. Light equipment could be flown in thus saving wear on the roadway.

Ruffatto's have proven themselves as good stewards of the land. It is in their best interest to take care of what they depend on. They plan a five day trip in, five day repair time and five days to come out. Fifteen days is a minimal amount of time. The healing process will start immediately and in a relatively short time one will not know they were in and out with machinery. Ruffatto's have a clear understanding of what is involved and strive to make all concerns covered. They will make the road impassable to vehicles as they come out and the scenic trail will be improved yet restored to hiking as it is now.

As an arm of the United States Department of Agriculture, we the local Stockgrowers Assn., urge you to promote the growth and positive influence agriculture has in our local, state, and national presents.

Please allow Alternative B to become the approved action for the Bass Lake Dam Reconstruction. The reconstruction of the old Bass Creek Road will be minimal problem to the Selway Wilderness compared to the benefits the completed job will allow all of the public, not just those involved.

Response:
These comments have been considered in the FEIS.

Water Cooperative of the Bitterroot Valley

On behalf of the Water Cooperative of the Bitterroot Valley, we are responding to the "DRAFT ENVIRONMENTAL IMPACT STATEMENT (DEIS) for the Bass Dam Reconstruction Project." The Bitter Root Water Cooperative is representative of a coalition involving 1200 families in this community dependent on dams and drainages for irrigation. The directors met and wish to support the Alternative B Proposed Action as the preferred action as described on page Ch 2-9 in the DEIS for the following reasons:

1-- In 1950, there was an access road built to Bass Dam and is currently available for improvement and reuse;

2-- Should this method be utilized there would be a cost savings of $40,000 that would be required with other proposed plans and it would take the least amount of days;

3-- For project efficiency---large track loaders and excavators that can complete reconstruction to meet State Dam Safety Standards with the restoration of the trail in the return trip;

Wilderness integrity---We have learned over the years with the vast amount of dam reconstruction carried on by different associations, that the best method of maintaining or reconstructing dams and reservoirs with permanent easement in the wilderness is to accomplish the work as quickly as possible. This is with the utilization of the best equipment and tools necessary for a clean, expedient job. We have found in the past, that this method has the least impact on the wilderness and benefits both the wilderness and the dam or reservoir owners.

We also feel the Forest Service should share cost in the trail work on the return trip especially with the installation of water bars to improve drainage. This would help with public access to this wilderness area in years to come.

With a limited knowledge of these things, we believe this particular proposal would have the least effect on the fisheries, plant species and wildlife of this area.

Thank-you for your work with our water irrigators in the preservation of water resources in this instance.

Response:
These comments were considered in the completion of the FEIS.

Brad A. Bauder

After reading information on the Alternative 4-B, I'm under the opinion that environmental impact on the Bass Creek drainage is irrelevant, The location already has an existing road to the reservoir. The cost of cleaning road for the private consumer should be the issue, not a fly in alternative.

Response:
The cost of alternative methods of access was identified as an issue in Chapter 2, and the estimated project costs, including access, are disclosed in Chapter 4.

Bumbarger Law Office

Bumbarger Law Office appreciates the opportunity to comment on the Bass Lake Dam Reconstruction Draft Environmental Impact Statement. I, Tonya D. Bumbarger, am counsel for the Bass Lake Reservoir Company in this project. However, these comments are not part of my representation of the Company, and are to be construed as my opinion and views only and not those of the Bass Lake Reservoir Company.

The Bass Lake Dam Reconstruction project illustrates the fallacy of placing within wilderness areas lands that have a long history of occupancy and use by man and do not have now and never have had since the 1860's the attribute of being untouched by man. The perpetuation of the fallacy causes a large waste of resources both on the part of the Forest Service and on the part of the reservoir owner. Both parties are working towards an impossible objective, to make a large man made structure appear and function as though it is not really there.

Response:
The existence and compatibility of the irrigation reservoirs within the wilderness are beyond the scope of this analysis.

The Wilderness Act and its legislative history recognize the right of the Bass Lake Reservoir Company to have its dam and reservoir at the present location. A right of access compatible with the needs of the Company is inherent in this recognition. The Company is subject to dam safety and operational laws and

guidelines and the Company is entitled to operate it facilities in full compliance to protect life and property. Wilderness values are secondary to the Company's legal responsibility to manage its dam and reservoir in compliance with federal law. The Company is legally liable to protect life and property downstream from the reservoir. Even the preservation of "Wilderness Values" does not justify an increased threat to life and property in the event of an imminent disaster.

Response:
Reasonable access to the facility will not be denied by the Forest Service. This access will be granted under the authority of the Acts of 1866, 1891, and the Wilderness Act of 1964.

The economic comparisons between the different Alternatives in the EIS do not compare apples to apples. The difference in costs between the Company's submitted proposal (not the Company's proposal as modified by the agency) and Alternative 3 is between $50,000-$75,000 when all hidden costs are accounted for. There are no mitigation benefits created that are long term when tens of thousands of dollars are spent on helicopters, instead of making the facility stronger to mitigate against the need for the company to do more maintenance work until the next complete rebuild of the structure.

Response:
Cost categories have been revised and are now consistent between alternatives. The costs associated with work needed to provide safe passage of the equipment over the trail in Alternatives 2 and 4 have been added. Also, the trail rehabilitation costs have been added to Alternatives 2 and 4.

The Wilderness "Trail" is not a trail at all, it is a road that the company has invested tens of thousands of dollars into over the past one-hundred plus years. The idea of the existence of a high hazard dam without sufficient access is unacceptable in law and irrational in fact. The Agency has a duty to protect Wilderness values, but they also have a duty to protect the property interests of the Bass Lake Reservoir Company. The Agency's duty is to protect the Wilderness from unnecessary or undue damage. The Company has never proposed to do anything that is not necessary to bring it into compliance with federal law and to manage it in compliance with federal law. The Company has a right to have its facilities located where they are, even under the Wilderness Act of 1964. In my opinion they have gone far beyond in terms of time and money what they are required to do. The Company's policies and board members are a testimonial to preservation and environmental consciousness. The Company as an owner of properties within a Wilderness boundary is not subject to the same rules as the public at large. This premise for the relationship between the Forest Service and the Company is recognized in law but has not always been followed by the Agency or understood by the public. An educational effort in this direction perhaps in the Agency and with the public would go a long way towards conserving resources that are now wasted. The Company's proposal is the Alternative that the Agency is obligated to select. Alternative two appears to be the Company's proposal with modifications by the Agency. Further adjustments may have to be made in consultation with the Company in order for the Agency to fulfill its duty to protect the property interests of the Bass Lake Reservoir Company.

Response:
The selected alternative provides for access and reconstruction of the dam, while addressing and protecting wilderness and resource values.

Cummings Ranch

I am Ed Cummings. I ranch and live on 1,000 acres on the southern edge of the alluvial fan at the mouth of Bass Creek in Ravalli County. I have previously written a comment in favor of a practical plan for needed maintenance of the Bass Lake Dam. I now comment in favor of Alternate 2 of your Draft E.I.S.

The water stored by the dam is essential to maintain the agricultural character of the Bass Creek alluvial fan and stem the tide of residential development.

The dam needs to be maintained in a structurally safe manner The only manner in which maintenance can occur is one that is cost efficient Factors that drive up costs will serve to prohibit the maintenance.

Roading heavy equipment into the dam is the most cost effective way to do maintenance. The forest will quickly reclaim the road when the equipment comes out.

Response:
These comments have been considered in the FEIS.

Now I have some questions

1. I own the first right to use 300 inches of water from Bass Creek What impact will the alternatives have on my water right?

Response:
All alternatives will provide and maintain current levels of irrigation water.

2. Why doesn't the E.I.S. address the impact on the families and lands irrigated by waters from Bass Creek? The entire Bass Creek drainage and the alluvial fan at it's mouth seem to be one ecosystem.

Response:
Chapter 3, Social and Economic section, discusses the value of the irrigation water provided by the reservoir for ranches and lands. The effects to the watershed, soils, and aquatic ecosystems of Bass Creek are discussed in Chapter 4.

David Hudson

My feeling on the Bass Creek Reservoir restoration are that motorized vehicles should be allowed to use the road to restore the dam. Air lifting equipment in would cost approximately $100,000 or more and as you know the Forest Service as well as everyone else is on a budget cut. I feel the Ruffatto family and others should not be denied access on the original road built to service the dam. This State and community were both built on farming and ranching and these reservoirs represent the lively hood of many Montanan's. The present Dam Safety Act mandates that the Dam be repaired or drained, so time is of the

essence. I also feel that the road should be left passable for emergency use in the future. I do not feel that removal of rock slides, big rocks or other obstructions would be a detriment to the wilderness trail use.

Response:
Emergency access for dam operations is beyond the scope of this analysis. Current access for emergency operational needs is the trail. With the selected alternative, that access will not change. The planned reconstruction will provide for safe dam operations. Emergency access can be provided with helicopters or by using the trail. The rehabilitation of the trail is planned to meet direction in the Forest Plan and the Wilderness Act.

I was born and raised in Montana in the farming and ranching community and intend to make it my home forever. Speaking for myself and quite sure, for many other Montanan's, I feel we all care greatly about the future of this great State. Therefore, suggest that the care and future be decided by Montanan's.

Dean S. Bauder

After reading the BASS LAKE DAM RECONSTRUCTION DRAFT ENVIRONMENTAL IMPACT STATEMENT, I came to the conclusion that the money needed for the project should come from the money used in preparing this inane tax wasting Impact Statement. But since the money has already been squandered I would have to support common sense measure Alternative 4-B.

Thank you for consideration.

Response:
These comments have been considered in the FEIS

Ed Hackett

Having read the Bass Lake Dam Reconstruction Draft Environmental Impact Statement, and knowing some of the background involved, I would like to comment.

Alternative 4-B moving heavy equipment over existing road is the most viable alternative in my opinion.

I believe that all equipment, material, and man power should be transported over the road.

I do not feel that there would be a lasting environmental effect

Thank you for your consideration.

Response:
These comments were considered in the completion of the FEIS

Friends of the Bitter Root

FOB appreciates the opportunity to comment on the draft EIS for the proposed Bass Lake Dam Reconstruction (BLDR). This is the first of the recent wilderness dam reconstruction proposals, and it would appear that future public acceptance or consensus for other rebuilding proposals might very depend to a significant degree upon the outcome of this first (demonstration?) project.

It appears quite certain there will be significant public interest in the final outcome(s) of this project, mainly as to whether the total benefits significantly outweighed the impacts.

The Regional Forester's determination on Regional Direction (6/3/92 - wilderness dam management) in the response to public comments, clearly stated:

"A ... decision to permit mechanized/motorized equipment on a specific proposal would have to be based upon rigorous resource analysis and NEPA disclosure; disclosure that depicts the relative impacts of alternatives on wilderness resources (s). NEPA processes are our Nation's basic environmental protection charter, and as such, are not only binding upon ALL Federal agencies, but provides a consistent rule of application in decision-making." (emphasis in original)

The 6/3/92 Regional Direction also stated that:
"Decisions on the use and transport of motorized/mechanized equipment must be made on a case-by-case basis," and; "The value of the American public are as diverse as the people themselves. Any action which benefits one segment tends to adversely impact another."

The BLDR proposal is a unique, site-specific situation. The positions reached by this organization therefore will not be a precedent for other wilderness dam reconstruction proposals that might be subsequently initiated. Each wilderness dam reconstruction proposal will be closely analyzed, and responses provided based upon the individual and unique situation involved. One major consideration common to any organizational position will likely be the perceived attitudes of a dam permittee towards the wilderness values or attributes.

The Bass Lake Dam permittees' have demonstrated for some time a strong commitment and willingness to work with other concerned parties to reach a consensus, and have likewise demonstrated a sensitivity towards wilderness and/or environmental resources. We are in basic agreement with much of the BLD reconstruction proposal, but there are portions of the DEIS NEPA analysis and the proposed actions with which we do have serious concerns.

The Regional Forester's determination on Regional Direction (6/3/92 -wilderness dam management) in the response to public comments, clearly stated: "A ... decision to permit mechanized/motorized equipment on a specific proposal would have to be based upon rigorous resource analysis and NEPA disclosure; disclosure that depicts the relative impacts of alternatives on wilderness resource (s). NEPA processes are our Nation's basic environmental protection charter, and as such, are non only binding upon ALL Federal agencies, but provides a consistent rule of application in decision-making." (emphasis in original)

The Forest Service must fully comply with the strict mandates of NEPA/CEQ and all applicable Federal or State regulations. Subsequent to the above cited Regional Forester's statement, it is noted that this proposed reconstruction was first initiated back in 1993, but was then dropped or delayed. No explanation or reason for the two year delay was evident in the DEIS. A FS internal meeting note from January 1995 mentioned funding problems, which may indicate the required NEPA analysis proposal did not have high priority with the Federal agency.

The FS IDT apparently met in January but then the DEIS process was apparently initiated relatively late in the 1995 seasonal "window" (for completing the necessary reconstruction work), while still allowing for compliance with the NEPA/CEQ requirements and procedural timeframes. It would appear that an earlier start on this analysis, or for future dam projects would have been more appropriate.

Wilderness rehabilitation requirements are clearly a major concern, and yet the DEIS disclosure was less than sufficient regarding this issue. The rehabilitation of the heavy machinery impacts presented in the DEIS appeared to be vague and open-ended, with little in the way of clearly defined and measurable parameters. This likely needs to be corrected if there is to be a reasonable opportunity for full consensus regarding this process.

Response:
The environmental effects of the alternatives and mitigation measures by resource area are included in Chapters 4 and 2. Other specific rehabilitation measures are included in the Trail Rehabilitation Plan (Appendix), the Air Operations, Safety, Materials Handling and Storage Plan, and in the Camp Management Plan. These are contained in the project file.

The 1950's impacts to the Bass Creek trail/road has healed to some degree since the last heavy machinery incursions into the dam site. We believe that these latest proposed impacts to the trail/road could be substantially mitigated by a well-designed rehabilitation plan. To that end, it would appear to be necessary that a fully disclosed, clearly articulated rehabilitation package should be developed up-front in the NEPA analysis. Close adherence to that rehabilitation package should be a important part of the requirements. Our review unfortunately found something quite different.

Response:
The Trail Rehabilitation Plan has been developed and is included in the Appendix. The objectives of the Plan are included in Chapter 2.

The BLDR DEIS cover was dated May 1995, and a separate cover letter mailed with it was dated June 6, 1995. There was no rehabilitation plan clearly outlined or set forth in the DEIS, (even though Federal Courts consistently have held that an Environmental Impact Statement is required to be a "full disclosure" document).

After the release of the BLDR DEIS, (and because of the lack of site-specific rehabilitation disclosures), the internal project file's background documentation was requested. The Forest Service then released the internal file "meeting notes" (which were dated July 5-6, 1995).

In those FS 7/5-6 meeting notes, it was stated that "these notes correspond to a video tape and aerial photos that identify the numbered stations." "Color photos....accompany this narrative. The stations are also identified on the ground with numbered blue/white striped flagging." "These notes are intended to form the foundation for a Rehabilitation Plan for the Bass Creek Trail". (emphasis added)

These notes documented a previously undisclosed (in the public DEIS document) Forest Service additional proposal to widen the lower three and one-half mile of the existing trail from the campground because "a wider trail tread is desirable on the first 3.5 miles of trail to the wilderness boundary. This allows people and families to walk or ride side by side".

This additional Forest Service proposed item might be unacceptable, dependent upon exactly what is meant by the relatively vague term "widening". The NREPA wilderness proposal apparently advocates extending the existing wilderness boundary down to the trailhead, and this FS added proposal may be in conflict with NREPA proposal. To allow this "widening" could potentially adversely affect future options for designate this portion as wilderness.

There are other concerns about this proposed "widening" that seem to raise questions regarding its supposed benefit. The DEIS acknowledges heavy public use for the first 3 to 5 miles of trail (DEIS at 3-10). The Forest Service's proposed trail widening might well increase that trail usage, (and possibly add to increased access opportunities for violations by motorized ORV's).

These canyon portals accessing the wilderness apparently receive very heavy usage already and may eventually require limitations or permitting on usage to reduce the increasing impacts to the wilderness attributes. The Forest Service's trail "widening" proposal then appears to be somewhat in disharmony with the acknowledged usage problems already existing.

Response:
The Trail Rehabilitation Plan has different objectives for various sections of the Bass Creek Trail. The section of the trail, outside the wilderness and near the Charles Waters Campground, is currently wider than the upper section of the trail because of it's former use as a road and from the amount of current use, with people walking or riding horses side by side. Drainage and rehabilitation work will occur along this section, but there are no plans to make it wider than its current condition. This is compatible with Forest Plan trail standards. Heavier use in the non-wilderness section of trail has not been identified as an issue.

There are apparently 17 "rehabilitation" items listed in the 7/5-6/95 FS meeting notes, and it would appear essential for the proposed trail/road rehabilitation plan to be clearly and publicly disclosed up front (within the public DEIS documents) so that all concerned parties might better understand what is proposed to be accomplished - and what is not going to be accomplished.

Response:
The Trail Rehabilitation Plan has been developed and is included in the Appendix. The objectives of the Plan are also included in Chapter 2.

Objectives and methods by existing trail conditions are presented along with timing considerations.

Another statement in the meeting notes raising potential concerns is the statement that "no place along the old road was identified as needing earthwork or bank pull downs to rehabilitate the old road". The BLDR DEIS disclosed that a Forest Plan Standard is currently not being met for visual quality, (damsite and portions of trail/road-DEIS at 3-32). Will the Forest Plan wilderness VQO Standard be able to be met for the trail/road after the rehabilitation work? Conversely, is the rehabilitation proposal going to allow continued long-term impacts to the visual quality standards for the wilderness resource? If so, what is the rationale? The DEIS disclosure documents appear to vague on this subject. There are reasonable concerns that the proposal of restoring the Bass Lake trail/road to a single tread width with full vegetation restoration on both sides was apparently never adequately disclosed or considered in the DEIS.

Response:
The existing condition of the trail does not meet Forest Plan visual quality objectives as disclosed in Chapter 3. The effects of Alternative 2 to visual qualities are also discussed in Chapter 4. The visual quality objectives will not be met for several years because of the disturbance to soil, rocks, and vegetation along the trail. The Trail Rehabilitation Plan includes measures to mitigate visual disturbance along the trail. Objectives are to enhance vegetative and soil recovery, allowing the visual quality objectives to be met in shorter timeframes. Without mitigation measures, visual recovery would occur later. Bank pull downs as well as fill slope returns were considered. It was determined, that in most cases, this practice would result in greater and more long term visual impacts than other methods of visual quality restoration.

There are apparently heavy noxious weeds (knapweed; elsewhere tansy?) infestations along the trail/road that are shown in DEIS color pictures. The knapweed may be spread even worse by this proposed heavy machinery and trail/road work or widening. What are the options for eradication, or at least attempting some significant control of this noxious weed problem within this area of the wilderness? This is likely another example which should be clarified and/or disclosed in the NEPA site-specific documents.

Response:
Noxious weed infestations are discussed in Chapter 3, Vegetation. Mitigation measures for controlling the spread of noxious weeds during project implementation are discussed in Chapter 2, as well as monitoring needs for noxious weed spread. Eradication or significant control of noxious weeds in this area of the wilderness, beyond that caused by this particular action, is beyond the scope of this analysis, and is addressed in the Bitterroot NF Weed Control EIS.

2,377 cubic yards of talus slope material is apparently proposed to be removed to use in "reconstructing" the dam (DEIS at 1-3). This might be an added impact to the wilderness resource and we wonder what rehabilitation measures were considered here. Was there any consideration of the possibilities of removing the needed material from the lake bottom area? Again, the DEIS appeared to be silent on this subject.

Response:
There will be no soil or vegetation disturbed with the removal of material from the talus slope where the large rocks are found. Rehabilitation will consist of naturalizing the slope, with the excavator. This has been added to the mitigation measures in Chapter 2. Lake bed material is not suitable for the rip rap or for the fill material needed on the dam crest.

A sensitive plant, (Bitter Root Bladderpod - formal listing likely justified; DEIS 3-13, 14, 15 & 4-8) is apparently in the immediate vicinity of the 1950's "borrow pit" (probably the vicinity shown in one of the DEIS's color pictures). What permit stipulations or rehabilitation measures will be required to fully protect this unique species. The DEIS appears to be silent on this subject as well.

Response:
The anticipated effects to the Bitterroot Bladderpod are discussed in Chapter 4. When this sensitive plant was discovered near the dam site, the original reconstruction proposal was modified to ensure that the habitat and plants would not be disturbed. None of the proposed alternatives conduct activities where sensitive plants occur.

The proposed action also requires a new log boom, (140 foot boom of western larch - 13 logs five feet long, 12 to 18 inches in diameter - DEIS at 1-3). The DEIS is appears to be silent as to just where the necessary logs will come from. Will they also be taken from the surrounding area, (similar to the talus rock), or will the logs be flown or packed in from elsewhere?

Response:
The logs will be provided by the dam owners and will come from a local sawmill. They will be flown to the site from the helibase on private land.

The DEIS states that the proposed alternative 2 should only take one season approximately 30 days (DEIS at 1-4). Elsewhere the DEIS says 6 to 8 weeks (DEIS at 4-21) Which is it?

Response:
Alternative 2 is estimated to take 25 days to complete. Chapter 4 has been revised to be consistent with Chapter 1.

The "benefit" of using heavy machinery is also presented as allowing the work to be done in one season, but the DEIS apparently then qualifies previous statements, and allows that the work may take longer. This item needs clarification.

Response:
With the heavier equipment proposed, Alternative 2 completes all needed work in one season. With the smaller equipment proposed in Alternatives 3 and 4, maintenance of the inlet structure is required at 3-5 year intervals, with eventual replacement of the inlet structure in 20-25 years. Alternative 2 best guarantees completion of all necessary work in one season.

Wolf sign has apparently been found in the surrounding vicinity (DEIS at 3-25); mountain goats are also in the area, and there are some types of early hunting seasons in wilderness. Accordingly, the decision and permit should perhaps

stipulate that no hunting/shooting by the workers would be allowed. Additionally, since the workers will be in there for an extended period, (with machinery), a "no hunting/shooting" requirement could prevent any potential abuse of that unusual opportunity. This proposed stipulation would most likely not be burdensome or unreasonable to the permittees.

Response:
The mobilization, repair work, and demobilization will occur before the beginning of general hunting season. For safety reasons, hunting will not be permitted within the area immediately surrounding the dam. The wilderness ranger and the Forest Service engineer assigned to the project will ensure this.

The Biological Opinion's are purported to be in the "project file" at the FS offices. With timber sales, they are included with the DEIS documents. They should be included with the DEIS/FEIS package available to the public.

Response:
To save printing and mailing costs, the Biological Assessment and Biological Evaluations will be available for review in the project file. A copy of these documents will be mailed to the commentator.

Previously, the wood debris taken from the lake has apparently been burned on the face of the dam itself. This has apparently caused rapid breakdown of the dam's protective rock face (dissolves into small erodible particles). The lake wave actions have been been able to further erode the dam's protective cover or facing.

There perhaps should be some consideration of whether this practice will be continued, otherwise allowing it to continue may cause more accelerated dam facing erosion - which in turn might again require that heavy machinery to be used in the wilderness sooner than otherwise necessary.

Response:
This practice has been discontinued, and debris burning has been relocated to more appropriate areas.

In closing, there likely should have been an attempt at including some additional third-party engineering study or review, which might have better defined if there were other reasonable options for the proposed reconstruction. This also may have better defined the required reasonable range of alternatives. The "need" for a Forest Plan Amendment, (DEIS at 4-19, 20), might either have been avoided or, (conversely), the need for such an amendment would have been better defined and/or supported by such an analysis.

Response:
Engineers from the Forest Service, Corps of Engineers, State of Montana, and private consulting firms have reviewed the dam and the repair needs. The DEIS mistakenly identified the need for a Forest Plan amendment with Alternative 2. An amendment is not needed because the methods and equipment proposed with Alternative 2 are the minimum management actions which accomplish the objectives with the least impact on the physical, biological, and social characteristics of wilderness (minimum tool definition, Selway-Bitterroot Wilderness, General Management Direction, 1992, Appendix G-1).

In the case of Alternative 2, the objective is to complete all the necessary repair work in one season.

Please send us the BLDR project documents in a timely manner when they become available.

Friends of the Bitter Root

Subject 7/25/95 Forest Service announcement regarding additional machinery requirements for the Bass Lake Dam Reconstruction (BLDR) that were disclosed after the public comment period for the DEIS

On July 25, 1995, the BLDR IDT leader (Dave Silvieus) sent out an announcement letter which referenced a 7/23 letter by permittee Tom Ruffatto and a subsequent discussion with Ranger Weldon on 7/24.

The DEIS comment period on the BLDR proposal officially ended 7/17. There was an informal extension for public comments which ended 7/21/95.

Apparently it was belatedly realized that the pipe "fusion" machinery would need to be heavier (a 4,500 pound machine) than initially proposed due to the "cold weather" requirements.

After six or more years of full awareness that the Bass Lake Dam would need reconstruction, after several years since the FS announced intention to do an EIS on the proposal, and after the BLDR DEIS comment period was completely over, there apparently now is an additional proposal to drive even more heavy equipment eight miles into the Selway-Bitterroot Wilderness.

The initial proposal outlined in the BLDR DEIS disclosed that the agency and permittee's "preferred alternative" (Alternative 1) would likely require two pieces of heavy earth moving machinery to be driven up the old and partially recovered road/rail to the dam.

The 7/25 FS letter to the public now increases the potential for adverse impacts by the late disclosure that still another piece of heavy equipment (a 5,000 pound 4-wheel drive farm tractor) is proposed be driven into the dam area towing a 4,500 pound pipe fusion machine on a double-axed trailer behind it.

Mr. Silvieus's letter of 7/25 references a "discussion" with FS employee K. McMenus on the same day where it was apparently "decided" that the proposed additions or changes to the BLDR proposal were deemed "not significant" and that they "can be addressed in the FEIS."

FOB does not concur with that ad-hoc disclosure approach and we maintain that the appropriate course of action under the NEPA regulations require preparation of a supplemental DEIS. This would enable the public to be fully informed and make informed comments on exactly what the potential tradeoffs and benefits will entail.

This latest proposal essentially constitutes a new alternative that was not disclosed or presented to the public in the DEIS process. The latest proposal will likely require a more finished, refined, and surfaced roadbed than the

initial proposal. The costs, (economically and environmentally), and the complexity of the proposal will also likely be significantly affected and/or increased.

Response:

The farm tractor and trailer are lighter and narrower than the other equipment in Alternative 2. The addition of the farm tractor and trailer mounted fusion machine will not require additional clearing or improvements to the trail, beyond what is necessary for the excavator and loader. There were no additional effects to the trail or resources identified.

A supplemental DEIS at this stage would not incur any delays for the proposed project because the FS has previously acknowledged that, (due to their delayed start on the DEIS process), there is no possibility of the actual reconstruction project getting underway this season.

We mentioned in our 7/21 comment letter on the BLDR DEIS that:

> "....there are portions of the DEIS NEPA analysis and the proposed actions with which we do have serious concerns. The Regional Forester's determination on Regional Direction (6/3/92 - wilderness dam management) in the response to public comments, clearly stated: "A...decision to permit mechanized/motorized equipment on a specific proposal would have to be based upon rigorous resource analysis and NEPA disclosure; disclosure that depicts the relative impacts of alternatives on wilderness resource(s)."

Our 7/21 comment letter also discussed numerous concerns or issues which we believe must be fully addressed up front in the required NEPA disclosure documentation made available all involved parties.

Representative of FOB have (subsequent to our 7/21 DEIS comment letter) made two separate inspection trips reviewing the proposed activity area. Those trips have indicated that there are significant further deficiencies in the BLDR DEIS's site-specific disclosures and/or discussions of the cumulative impacts and the potential adverse impacts (short and long term) resulting from this proposed action within a designated wilderness area.

The DEIS and the other agency documents subsequently released propose to minimally widen, and in some places reconstruct, the old road bed to accommodate the equipment proposed to be used. This likely will entail digging and/or blasting and/or covering up a significant number of large rocks or boulders. Some of these are deeply embedded or are bedrock in an estimated 6 to 8 locations along the eight mile long roadbed/trail that leads to the dam. Some of the areas are 200 plus feet long and are on steep (estimated 15-20 percent) grades. On these sites, most of the "fines" have been washed away in some spots, the existing roadbed is relegated to a 15 foot wide by 2 to 3 foot deep gully with large rocks, boulders and bedrock. Even if borrow material were present, (and in most cases it is not), digging out the road banks to provide fill material and surfacing is not a satisfactory solution. Keeping soil disturbance to a minimum should be one of the principle objectives of the proposed project within the wilderness boundary.

How much borrow material is needed; where is it to be obtained; how is it to be hauled; where is it to be placed? Such critically needed site-specific activity information was not disclosed in the DEIS or supporting documents and must be corrected in a supplement to the inadequate DEIS.

Response:

Surfacing to improve the trail surface is not needed. Vegetation clearing and the removal of rocks and boulders will provide adequate passage for the equipment.

It must be emphasized that several of these areas present some particularly difficult, complex and challenging reconstruction and rehabilitation problems. An example of this is one site mentioned at unnumbered page 3 (item #12) of the July 5-6 field trip and IDT notes (the trip and resulting notes were done only after the BLDR DEIS was already sent out for public review and comments).

At this site location, the old roadbed crosses a perennial stream which is the largest side drainage tributary to Bass Creek along the old roadbed. For approximately 200 feet, (approaching and at the crossing), the old roadbed climbs at approximately 20 to 25 percent. This poorly located and significantly inadequate approach to the crossing has channeled most of the normal stream flow directly down the roadbed. The result is a 15 foot wide and 3 to 4 foot deep, steep gully which in places is washed down to bedrock and/or layered with large rocks and boulders.

The FS July 5-6 field trip notes indicated that the proposed "solution" is to "deepen the drainage channel (stream channel) so it concentrates the braids into one channel that carries across the old road - reinforce with rock".

We believe that unless special precautions are taken, digging out the stream bed could cause additional sediment to be washed into Bass Creek. How the roadbed, at this point, is to be reconstructed and whether there are opportunities to relocate the approach and the crossing are not disclosed in the "notes". This is just one example of the many significant deficiencies evident in the BLDR DEIS and supporting documents.

Response:

The channel work will be conducted during late summer during low stream flow. Relocating the trail at this point would create more soil disturbance and increased sediment potential. Concentrating the channels and diverting them away from running down the trail will reduce current erosion problems.

Other concerns include:
- The proposed action apparently is to pull 3 inch and greater regeneration out of the ground (FS July 5-6 field notes at page 2), shaking the root wads and hiding them below the road.
FOB instead suggests sawing the saplings at ground level, limbing the stems and bucking the stems into short sections. This material should be positioned on the uphill side of the road and (during the rehabilitation operation) should be placed on the roadbed so as to form a single-lane trail. This would facilitate regrowth of plant cover and would minimize soil disturbance. We believe the roadbed should be sawed out and the material lopped and stored along the

roadside prior to roadbed reconstruction. This portion of the project could be done in July which would help ensure that the project would be completed in one session.

- From the trailhead to the old log cribbed dam, the old roadbed is (in some locations) immediately adjacent to Bass Creek. The logged cribbed dam is approximately 1.5 miles from the trailhead. This particular section contains several rather long and steep grades that lack effective erosion control devices. Through the decades (since 1952) the lack of proper cross drainage structures and the lack of timely and adequate maintenance has caused steep road segments to erode down to boulders and in some cases, bedrock. In numerous locations, sediment continues to be directly delivered into Bass Creek. Irrespective of this proposed project, the Ranger should take immediate action to correct this situation. Not only are cross drainage devices needed, but slash filter windrows and/or something similar must be installed and properly maintained to prevent sediment from reaching Bass Creek. This must be addressed in a site-specific manner in the EIS.

- A particularly heavy noxious weed (knapweed) infestation occurs along approximately the first mile of the old roadbed. At some points the roadbed is 20 to 25 feet wide. When constructed in 1952, apparently much of the soil was sidecast or has since washed away. In addition, human and livestock use has kept much of the broad road surface bare. Knapweed has thrived in this continuously disturbed, bare, dry area. We suggest that knapweed control could best be achieved by reducing the roadbed to a single lane trail. This should be done by using large rocks and logs which are readily available. The area that has been physically restricted from human and livestock traffic should be scarified, seeded with native plants and grasses and heavily mulched. Successful recovery and knapweed control will likely take several decades, provided the restricted area is protected.

- The inspection trips clearly indicated that the cumulative impacts from continual sedimentation sources from the poorly located old roadbed/trail were not adequately disclosed in the BLDR DEIS. The NEPA site-specific disclosures regarding the amount of additional sedimentation likely to occur (considering the amount of work needed to get the equipment in and out) were essentially only glossed over as well. There will certainly be an increased (and potentially adverse) impact to the water quality and riparian attributes of Bass Creek.

Response:

Existing stream and trail conditions are described in Chapter 3. The trail is stable with erosion control and drainage adequate to protect stream quality (Chapter 3, Watershed) Chapter 4 discusses the effects of the equipment on the trail. The majority of the trail is away from the stream, and is so rocky that water and soil resources would not be significantly affected by heavy equipment access. Sedimentation and soil displacement would be local, temporary, and short term (Chapter 4; Watershed, Soils, and Aquatic Ecosystems; Alternative 2). Trail rehabilitation will improve drainage conditions along the trail.

The proposed alternative proposes to go far beyond what is required for the safe stabilization of the dam. Because of the proposal to do more than is necessary, the proposed alternative will require two Forest Plan Amendments

because of non-compliance with the Forest Plan Standards. ("It should be clearly understood that compliance with forest plan standards and guidelines and protection of ecosystem sustainability takes priority over any conflicts between .... other planned activities". - Chief Thomas; 6/13/94)

The proposed alternative failed to include full disclosure of the major equipment required to perform the objectives of that alternative, and the likely impacts resulting from utilization of that equipment.

The DEIS failed to disclose that a 500 gallon fuel tank will be located at the damsite and did not disclose fuel storage and transport details (see FS 7/25 letter) as well. Neither was their disclosure of any contingency emergency plans in case of a helicopter accident or other situation resulting in a fuel spill.

The DEIS failed to adequately disclose in a site-specific manner exactly what "rehabilitation" would be required to mitigate the impacts resulting from the failure to comply with Plan Standards. Along with, and because of, the litany of non-disclosures, the DEIS also failed to develop a reasonable range of alternatives to the "proposed action". An alternative which would have proposed restoring the Bass Lake trail/road to a single tread width with full vegetation restoration on both sides was apparently never developed or considered in the DEIS, in spite of the proposed non-compliance with Plan Standards.

The BLDR DEIS presented a "no-action" alternative, (which was essentially a do-nothing, or continue existing condition) but fails to disclose or discuss another option of lowering or even breaching the existing dam to reduce the necessity of periodically allowing excessive long-term impacts to wilderness attributes.

> (see Forest Plan Amendment #7, Sec. 11, M-2; "Motorized equipment or other non-conforming activities will be authorized when it can be demonstrated that; 1) it is the only feasible means of accomplishing the necessary maintenance; and, 2) the continued existence of the reservoir is more in the public interest than its breaching".)

There is also a significant question as to whether or not other engineer's (rather than only the one hired by the permittee's who certainly have a significant interest in keeping costs as low as possible) would not have been able to come up with still other alternatives and proposals that would be significantly less impactive then the currently proposed one.

We previously stated that "we are in basic agreement with much of the BLD reconstruction proposal, but there are portions of the DEIS NEPA analysis and the proposed actions with which we do have serious concerns". The significantly inadequate NEPA/DEIS disclosures to date clearly demonstrate a lower analysis and documentation commitment than would be utilized for any timber sale project on this Forest. This additional time frame now provides an opportunity to correct the serious inadequacies by the preparation of a supplemental DEIS.

As we requested before, please keep us on the mailing list and please send us the BLDR project documents in a timely manner when they become available.

Response:

The DEIS mistakenly identified the need for a Forest Plan amendment with Alternative 2. An amendment is not needed because the methods and equipment proposed with Alternative 2 are the minimum management actions which accomplish the objectives with the least impact on the physical, biological, and social characteristics of wilderness (minimum tool definition, Selway-Bitterroot Wilderness, General Management Direction, 1992, Appendix G-1).
In the case of Alternative 2, the objective is to complete all the necessary repair work in one season.

A letter discussing the need for the farm tractor and trailer and the fuel storage requirements was sent to the commentors. A meeting was also held with the commentors, to further discuss these changes to the proposal. The contingency plan for spill emergencies has been developed by the Reservoir Company. Rehabilitation plans for the trail are in the Appendix.
Rehabilitation measures for dam site and trail impacts are also discussed in Chapter 2, Mitigation Measures. Breaching the dam was not considered as an alternative, because an important part of the purpose and need for action is to provide and maintain irrigation water to dependant ranchers and agricultural lands. An alternative that lowered the elevation of the spillway was considered but not in detail, because it would not maintain current levels of irrigation water. Engineers from the Forest Service, Corps of Engineers, State of Montana, and private consulting firms have reviewed the dam and the repair needs.

Ruffatto Land & Cattle Company

Ruffatto Land & Cattle Company appreciate the opportunity to comment on the Bass Lake Dam Reconstruction Draft Environmental Impact Statement. We are major shareholders in the Bass Lake Reservoir Company and live on the Bass Creek 8 miles below the dam. Our 750 unit cow/calf ranch would be severely impacted should the Bass Lake Dam not be fully operational.
The Bass Lake Reservoir Company's motorized access to and from their reservoir on the existing road is both reasonable and necessary for the reconstruction project. Access on the existing road is also more cost-effective than spending thousands of dollars to helicopter in the equipment . However, ''...naturaliz[ing] the road by narrowing the tread, replacing rocks and vegetation, and scattering broken limbs and stems '' is contrary to safe emergency dam operations.

Response:
Emergency access for dam operations is beyond the scope of this analysis. Current access for emergency operational needs is the trail. With the selected alternative, that access will not change. The planned reconstruction will provide for safe dam operations. Emergency access can be provided with helicopters or by using the trail.

We support the selection of Alternative 2 for reconstruction of Bass Lake Dam within the constraints of an undocumented statutory reservoir right-of-way.

Harvey Hackett

I reviewed the Bass Lake Dam DEIS and make the following recommendations:

1. Altermative B, moving heavy equipment over the rehabilitated road be adopted.
2. Maintain this road for future dam safety emergency access.

Response:
Emergency access for dam operations is beyond the scope of this analysis. Current access for emergency operational needs is the trail. That access will not change with the selected alternative. The planned reconstruction will provide for safe dam operations. Emergency access can be provided with helicopters or by using the trail.

All required equipment should be moved over this road and helicopter support should not be required.

Response:
An alternative was considered that involved moving all equipment over the old road. This alternative is described in Chapter 2. It was eliminated because of the amount of ground disturbance and resource effects, and its incompatibility with Forest Plan standards.

My family and I back-packed to Bass Lake about the summer of 1970 over the road which had been rehabilitated to single file foot and stock travel by dumping rock and trees in the road. About the same time period the main Wilderness Access Trails were raised to a much higher construction standard.

Kathy and Jerry Stamm

We are writing to express our support for the U. S. Forest Service allowing the Bass Creek trail, between the trailhead and the dam, to be used for the transport of motorized equipment necessary in order to rebuild the dam, which has now been declared unsafe . This portion of the trail as you know, was originally a road built for the express purpose of accessing the dam. Regulations which disallow motorized vehicles from using the trail were made after this road was constructed, and should not be used to nullify the original purpose of this road. Transporting motorized equipment on this portion of the trail is the only cost effective way to get it to the dam site.

We are regular users of the trail and realize this project may require that the trail be closed for normal use during the time of the dam repair. However, we support the right of those needing to repair the dam to use the trail to access the dam.

Response:
These comments have been considered in the FEIS.

Montana Department of Fish, Wildlife, and Parks

Page Ch 1-3 para 1 the proposal calls for a steel inlet pipe encased in concrete. Acidic condition in mountain lakes in the Selway - Bitterroot I

believe is universal for all the lakes. I suspect Bass Lake is no different The acidity of the water will eventually eat the metal and concrete in the inlet, probably sooner than later. I would suggest material less prone to acidic decomposition.

Response:
Other materials will be considered for the inlet structure. With Alternative 2, it would be possible to use polyethylene pipe in the inlet structure, as is planned for the straight pipe lining.

Photo #2- I disagree with the plan to provide a smooth riprapped surface and a uniform dimension spillway. Neither is necessary to pass PMF and neither will result in a project that blends with the Wilderness setting of the site. I believe a little more creative thinking need to be applied under the circumstances. This can be accomplished and still meet the goals of the project and be cost effective.

Response:
A smooth spillway surface is planned only where the spillway meets the dam crest. This is needed to minimize spillway width at this point and to prevent possible erosion on the shoulders of the spillway. This will be constructed with local rock and concrete mixed on site. The remainder of the spillway will be rougher in appearance. The entire spillway surface will be formed using locally available rock and will blend with the wilderness setting.

Page Ch 2-2 This project will have a long term beneficial impact on fisheries resources in the Bitterroot River drainage. Disturbance of the site will be a short-term impact to water quality fisheries. The water is also valuable for one of the larger intact working ranches in the Bitterroot that still has intact and functioning big winter range. The value of the ranch's open space is high with all the subdivision activity that has taken place in the Bitterroot drainage .

I agree with the selection of the preferred alternative. This alternative will allow the permittee to proceed with the best equipment to the best job on site in an expeditious manner.

Keith Osterheld, Jean Osterheld

Although we live just one mile north of Bass Creek, we are not shareholders in the Bass Lake Reservoir Company, hold no claims to the waters stored by the Bass Lake Dam, have no vested interest in it's operation or benefits, and are not threatened should the dam fail. Nevertheless, we appreciate the opportunity to comment on the DEIS. We have an appreciation of the concerns on both sides of this matter, having ranched in this valley for 34 years, but also having a concern for the preservation of the wilderness. Indeed, we belonged to the Wilderness Society and the Montana Wilderness Association for a number of years.

We shall present our comments in two sections. One will deal with the need for the current Bass Lake Dam water storage, going beyond the ranch irrigation need. The other will support your choice of Alternative 2, not only as the best balanced between economics and wilderness policy, but also as ultimately

the best from the viewpoint of preservation of the wilderness and of the wilderness experience.

A Need for the Bass Lake Dam Water Storage

1 Importance to ranches holding rights to Bass Lake

Alternative 1, "No action," has been rejected in the DEIS based upon the economic need for irrigation water and the costs of buying water rights if repair of the dam is not allowed. In this area, with crops needing about an inch of water a week during the growing season, and rain supplying about an inch a month, the economic importance of irrigation is easily established.

2 Importance to groundwater recharge

Less clear, but nonetheless true, is the importance of irrigation to groundwater recharge, the further, to maintenance of house wells and of late season Bitterroot River flows. Studies of observation wells in the Valley have shown that the water table rises rapidly with the start of irrigation and declines rapidly after irrigation ends for the season. One of these studies states, "Recharge in the area of study occurs primarily by the infiltration of water used for irrigation,..." (Ref. 1, p. 28). Also, "Direct recharge from precipitation in the Bitterroot Valley is small in comparison to the recharge from irrigation,..." (Ref. 1, p. 30).

A related study found that "In general, the [ground] water level gradually declines through the winter and early spring, then rises rapidly in May and June in response to recharge from precipitation and irrigation. It remains fairly high through the irrigation season, then declines rapidly after irrigation ends." (Ref. 2, p. 59, emphasis added). We are concerned, not only for the Bass Creek area, but also for much of the Valley, that reduced flood irrigation as a result of subdivision or of abandonment of storage dams will lead to groundwater shortage. The late-season irrigation made possible by high-mountain dams is important in maximizing the groundwater level going into the fall and winter seasons. Even if not removed by pumping from wells, the groundwater is continuously dropping, as it flows towards the Bitterroot River.

3 Relation to Bitterroot River flows

Maintenance of flow in the Bitterroot River is important to the related aquatic and riparian ecosystems. For much of the summer the tributary streams are watered by seepage and irrigation before they reach the river, suggesting that irrigation steals from and damages the river. Actually, for most of the year, i.e., from September or October through March, the outflow of the river at Florence exceeds the sum of the tributary inflows. This results from augmentation of the river by groundwater (Ref. 1, p. 40; Ref. 2, pp, 68-71). Most of this is contributed to the Grantsdale-Victor reach. The Bitterroot River is a gaining stream through the valley-floor area." (Ref. 2, p. 42)

The late season irrigation made possible by Bass Lake Dam insures a high groundwater level that helps carry our River through to Spring. The benefits of the proposed reconstruction project go beyond the agricultural and economic

4 Conclusion regarding need

Economic importance to agriculture of the water from Bass Lake is sufficient basis for rejecting Alternative 1. That conclusion is buttressed by the direct importance of flood irrigation to groundwater supplies and by the importance of groundwater to maintaining late-season Bitterroot River flows.

Response:
These comments have been considered in the FEIS. The groundwater recharge and late season flow supplements are recognized as other social benefits provided by the dam, but these are not part of the purpose and need for action and are outside the scope of the analysis.

B. Support for Selection of Alternative 2

1. With respect to possible lasting effect on the trail

The Bass Creek trail provides a very popular access route to the Selway-Bitterroot Wilderness Area. The reason is clear. The primitive road that was constructed for repair of the dam in 1952 constitutes an excellent trail, in spite of the effects of nature and the passage of time. The limited proposed use of it again as a road, with subsequent naturalization, will not alter significantly the nature of the experience of users of this trail. It is not now a real wilderness trail. On the other hand, it allows a level of wilderness experience to users who could not manage a more rigorous, more typical, wilderness experience. In doing so, it lets more of the public feel it is "their" wilderness, that they can use it, and it mitigates to a degree the elitist stand that extreme wilderness supporters project. In other words, we believe that the availability of this already existing more accessible wilderness route broadens the base of support for wilderness areas.

Alternative 2 will affect the Bass Creek Trail somewhat more than will Alternatives 3 or 4. Nevertheless, Alternative 2 is much to be preferred in other respects, and this trail has not been a "wilderness" trail.

Response:
These comments have been considered in the FEIS. The Bitterroot Forest Plan provides direction for wilderness and trail management by opportunity class.

2. With respect to preservation of the work area around the dam

The proposed plan defines areas to be protected and steps to be taken to restore the work area. That area around the dam site does not now have a natural appearance and still will appear less than natural after the work is done by any of the Alternatives. A dam rarely appears to be natural. Nevertheless, the unnatural aspects are in a small, well-defined area, and they create an attractive lake. Wilderness users have found the lake to be a pleasant camping spot and will continue to do so. The Ruffattos' respect for the land is award-winning. We are confident that they can be relied upon to carry out the proposed work in a responsible fashion, minimizing the impact on the wilderness.

Alternative 4 will affect the work area almost as much as Alternative 2, whereas Alternative 3 is likely to be more damaging. Ultimately, we see little

difference in the degree to which the sense of wildness will be reduced, given that it is not a wild appearing spot now.

Response:
These comments have been considered in the FEIS. The effected environment and the anticipated environmental consequences to wilderness resources are discussed in Chapters 3 and 4.

3. With respect to preservation of the wilderness experience during the work period

Since a sense of solitude is a necessary part of the wilderness experience, it is clear that such an experience will not be enjoyed fully by those who visit the Bass Lake area during the work period, no matter how the work is done. Any practical approach to accomplishing the required reconstruction will require some level of machine work and a number of people. Replacing machines with people and horses can be done only up to a point, and that "minimum tool approach" markedly increases the duration of the project. A longer period of work by any combination of man, horse, and machine means a longer period during which enjoyment of the Bass Lake area by visitors will be limited.

The DEIS compares the proposed Alternatives with respect to the duration of impact, but limits the comparison to the initial work period. The equipment brought to the project by Alternatives 3 and 4 is insufficient to do a proper repair.

Because the twin inlet pipes and concrete casing will not be replaced under those Alternatives, they accomplish only a temporary repair, requiring re-entry every 3-5 years to patch and seal the concrete. Each of those maintenance trips will require helicopter transport, coffer dam construction and machine pumping. These additional incursions should be included in the assessment of impact on wilderness users, and we have done so below:

Table 1.

	Estimated Duration of Work		
Approximate date-work	Alt.2 Permittee proposal	Alt. 3 Fly lighter equipment	Alt. 4 Walk lighter equipment
1995 - Initial project	25 days	50 days	35 days
1999 - Patch & seal (1)	0	5	5
2003 - Patch & seal (1)	0	5	5
2007 - Patch & seal (1	0	5	5
2011 - Patch & seal (1	0	5	5
2015 - Patch & seal (1)	0	5	5
2020 - SUBTOTAL, for first 25 years	25 days	75 days	60 days
2021 - 2045 - Next 25 yrs.	0	?? (2)	?? (2)

TOTAL FOR 50 YEAR LIFE OF ALTERNATIVE 2	25	???	???

(1) Because Alternatives 3 and 4 do not replace the twin inlet pipes and the concrete casing, patch and seal maintenance is needed every 3 to 5 years. This maintenance will require helicopter transport and use of machine pumps at the dam site.

(2) The repair in Alternative 2 is expected to last 50 years. The repairs provided by Alternatives 3 and 4 are only temporary, expected to last only 25 years, following which the twin inlet pipes and concrete casing will have to be replaced, presumably by the methods proposed in Alternative 2.

Response:
These comments have been considered in the FEIS. Additional discussion on the effects of the 3-5 year maintenance program in Alternatives 3 and 4 has been added to Chapter 4.

5. With respect to cost

In the preceding section we suggested that the duration of wilderness impact from work operations should encompass the entire 50-year period for which Alternative 2 is expected to be effective. We feel that cost comparisons, as well, should include scheduled later work. Those later costs are inherent in the decision being made. We present such a cost comparison on the next page.

Table 2	Estimated Repair/Maintenance Cost		
Approx. Year - Work	Alt. 2	Alt. 3	Alt. 4
1995 - Initial repair	$132,400	$170,580	$147,430
1999 - Patch & seal (1	0	5,000	5,000
2003 - Patch & seal (1)	0	5,000	5,000
2007 - Patch & seal (1	0	5,000	5,000
2011 - Patch & seal (1	0	5,000	5,000
2015 - Patch & seal (1	0	5,000	5,000
2020 - SUBTOTAL, cost for first 25 years	132,400	192,580	172,430
2021-2045 - Cost for second 25 years	0	???,???(2)	???,???(2)
TOTAL COST FOR FIFTY YEARS	$132,400	???,???(3)	???,???(3)

(1) & (2) See footnotes 1 & 2, Table 1.
(3) If in the year 2021 the reconstruction decision resembles Alternative 2, then the figures labelled (2) in the above Table would be $132,400, and the

Totals labelled (3) would be $327,980 and $304,830, respectively, for Alternatives 3 and 4.
(4) All costs are given in 1995 dollars.

It is a poor choice, a short-sighted choice, both economically and with respect to total eventual impact on this portion of the wilderness, to do a partial repair of this dam.

Response:
These comments have been considered in the FEIS. The additional costs associated with the 3-5 year maintenance program and the 25 year inlet replacement have been added in the FEIS.

6 With respect to preservation of endangered species

The area to be impacted by this project has been surveyed carefully for rare and endangered species, and all the Alternatives reflect those concerns. For almost thirty years we have been neighbors of the Ruffatto Ranch. They are good managers and excellent stewards of the environment. We are confident that they will be very careful to observe care in preserving species about which concern has been expressed.

Response:
These comments have been considered in the FEIS.

7 Conclusion regarding Alternatives 2, 3 and 4

Alternatives 3 and 4 are stop-gap approaches. They require so much future work , starting within 3-5 years, that they (1) ultimately cost much more than Alternative 2, and (3) in about 25 years will require a new round of major reconstruction, whereas Alternative 2 will leave the area free of intrusion for an estimated 50 years.

Response:
These comments have been considered in the FEIS.

SUMMARY OF OUR POSITION

Selection of Alternative 1, "No action," would have a high economic and environmental cost. Not only are extensive agricultural enterprises dependent upon Bass Lake irrigation, but also that irrigation assures high ground water levels, important to the functioning of water wells and to maintaining the flow of the Bitterroot River.

Of the remaining choices, it would be irresponsible to select Alternative 3 or 4. Because the minimize machine use, they cannot do the full reconstruction needed. As temporary expedients, accomplishing only a partial repair that must be patched every 3 to 5 years, they have a total cost in money and in abuse of the wilderness through repeated re-entry that is much greater than associated with Alternative 2. And, after 25 years reconstruction project of the level of Alternative 2 would be required.

The clear choice should be Alternative 2, and we strongly support approval of that plan. The somewhat greater initial degradation of the wilderness

appearance for this Alternative (relative to Nos. 3 and 4) will occur only in areas that already have a less than true wilderness appearance. The total impact on the wilderness experience for users of the Bass Creek Canyon area will be far less with this Alternative because the duration of work is far less over the life of the repair. The cost of the 50 year repair of Alternative 2 is far less, also, even when compared with the costs of the 25-year repair under 3 and 4.

We strongly support the selection of Alternative 2 for reconstruction of Bass Lake Dam. In our view, the DEIS significantly understates the superiority of Alternative 2 over Nos. 3 and 4.

Response:
These comments have been considered in the FEIS

References:
1. "Preliminary Report on the Geology and Water Resources of the Bitterroot Valley, Montana," R.G. McMurtrey, R.L. Konizeske, and Frand Stermitz, Bulletin 9 of the Montana Bureau of Mines and Geology, 1959.
2. "Geology and Water Resources of the Bitterroot Valley, Southwestern," R.G.McMurtrey, R.L. Konizeski, M.V. Johnson, and J.H. Bartells, Geological Survey Water-Supply Paper 1889,1972.

Ravalli Co. Fish & Wildlife Association

1. We would like to comment on the Bass Lake Dam Reconstruction Draft Environmental Impact Statement.

   a. We support Alternative 2.
   b. Alternative 2 is cost effective.
   c. We see no effect on endangered species.

2. Irrigation made possible by Bass Lake Dam helps ensure high groundwater levels that carry the Bitterroot River through the spring and summer.

3. Bass Creek trail is a very popular access route to the Bitterroot-Selway Wilderness area and we believe the machinery should be taken in and the work on the dam be completed as fast as possible and the area returned to wilderness. Do the job right with the thought of the dam not requiring repair for 50 years or more.

4. We oppose any type of temporary repair.

5. We would strongly support Alternative 2. Get in, repair the dam with sufficient machinery to do the job right and get out.

Response:
These comments have been considered in the FEIS.

Ravalli County Farm Bureau

The Board of Directors of the Ravalli County Farm Bureau favor the adoption of Alternative "B" of the Draft Environmental Impact Statement for the

proposed Bass Dam Reconstruction Project on the Stevensville Ranger District of the Bitterroot National Forest.

Your consideration of our preference will be much appreciated.

Response:
These comments were considered in the FEIS

Rocky Mountain Bank

Please consider this letter in regard to the Bass Lake Dam Reconstruction Draft Environmental Impact Statement. I have reviewed the statement and would ask that you consider the following remarks as the position of our bank on the proposed reconstruction.

The first consideration would be the economic impact of the dam on our valley. Certainly agriculture is a strong part of our valley economy. Of course this economy is dependent on irrigation for a maximum productivity. The reconstruction and the maintenance of Bass Lake Dam will support this industry It is becoming more and more apparent that our economy is fast becoming a service dependent economy which does not provide for a strong base. Agriculture continues to play a roll of our economy and we need to do everything we can to continue it's support. Certainly, the maintenance and reconstruction of this dam follows this thinking.

Another important issue on this reconstruction would be to maintain dams out of the valley to support the recharge of our ground water. As the valley grows we will see more and more pressure on the ground water usage. It is therefore incumbent on us to support anything that would enhance ground water. It has become evident over the years that irrigation in our valley contributes greatly to ground water. Therefore, it is important that we maintain the Bass Lake as part of that supply. Certainly the future well-being of our valley in general may be dependent on how we can maintain and protect our ground water.

We have reviewed the alternative methods that have been proposed for the reconstruction. Method number two appears to be certainly the most cost effective as well as providing the long term fix. We also feel that in the long term the major repair done at one time would have the least environmental impact on the area over the life of the dam. The environmental considerations on the trail as well as the dam are very important to our Valley. It appears most practical to do the job right initially to minimize impact over the life of the dam.

Thank you very much for considering our comments on this project. We hope you will consider our thoughts in making your decision and approve alternative 2 to repair the Bass Lake Dam.

Response:
These comments have been considered in the FEIS.

The Ecology Center, Inc.

Thank you for the opportunity to comment on the proposed Bass Dam Reconstruction Project. The following comments are submitted on behalf of The Ecology Center, Inc. and the Alliance for the Wild Rockies. We would also like to thank you for the extension of the comment period.

Alternatives for Consideration: We believe that all the potential alternatives for bringing Bass Dam into compliance with regulations under the Federal Dam Inspection Act of 1972 (P.L. 62-367), and to meet the requirements of the Federal Guidelines for Dam Safety of 1979, have not been explored.

As stated on Ch 1-1 of the Deis, "The dam is currently in an unsafe condition because a probable maximum flood has the potential to exceed the capacity of the spillway and overtop the dam". Therefore, in order to be in compliance, the dam must be able to pass the Probable Maximum Flood (PMF). Within the Abstract and Summary it is stated that '' Compliance With the federal dam safety requirements require the use of heavy motorized equipment to add rip-rap to the face of the dam, widen the spillway, fill low spots on the crest of the dam and replace the outlet pipe''. Excavation of the inlet area and replacing the current inlet pipes are not mentioned as required work to meet these regulations.

What work is specifically required to allow the dam to meet the PMF? Is the other proposed construction necessary in achieving this requirement (i.e. inlet, spillway construction)? We notice that the cofferdam installation and excavation for replacing the inlet pipes must not be necessary since it is stated under Alternative 3 of the Alternatives Considered in Detail Ch 2-11, that the lighter construction equipment that would be used "does not have the power or capacity to complete" these tasks. It is further stated that this alternative would complete the minimal work necessary to meet the dam safety requirements and laws".

Response:
The replacement of the inlet structure is needed to meet federal dam safety requirements. It has been added to the abstract and summary. Alternatives 3 and 4 would meet these requirements by lining the inlet pipes and maintaining the concrete components of the inlet structure every 3-5 years, which would extend the life of the structure for 20-25 years when it would need to be replaced. The heavy equipment described in Alternative 2 would then be needed to complete full replacement of the inlet structure.

We request to see an alternative which only employs construction which is necessary to meet the required safety standards. We believe that an alternative combining Alternative A - Primarily Primitive, Non-motorized / Non-mechanized on Ch 2-3 (for work such as the log boom) and Alternative 3 of those considered in detail, using lighter motorized construction equipment, could be devised to meet safety requirement while keeping cost within the range of the proposed action. This would involve a different approach, combining lighter construction equipment brought in by helicopter and the employment of primitive tools carried in by horse where possible.

Response:
All action alternatives employ only work that is necessary to meet the safety standards. The use of more primitive tools is included in Alternative 3. Alternatives were developed to clearly compare environmental impacts, to define issues, and to provide the basis for choice among options. The decisionmaker has the option of combining alternatives or choosing parts of alternatives in making a decision.

Under the Alternative Considered But Not Given Detail Study section of chapter 2, page 5, it is stated under Alternative C that this alternative was eliminated due to expenses and that it would be "possible to achieve the purpose and need for action without the use of the heavy excavation equipment that is proposed". This heavy equipment is the same equipment that will be used under the proposed action, except it will be walked in instead of flown in. This statement points out that the heavy equipment is not necessary to achieve the desired results, that less impactive, lighter weight equipment would suffice. We believe that feasible alternative which meet safety requirements and economic concerns, which employ the lighter equipment, do exist and should be explored.

Response:
It is possible to achieve the purpose and need for action without the use of the heavy construction equipment. Alternatives 3 and 4 do this, but the heavy construction equipment will be needed in 20 to 25 years to replace the heavy concrete inlet structure. Alternatives 3 and 4 also require the repeated 3-5 year concrete maintenance program described in Chapter 2, requiring the use of a helicopter, pump, mechanical hammer, and a generator.

The use of lighter equipment would eliminate the need for road reconstruction, thus helping minimize visual impacts upon the area, especially for the trail's "first 3-5 miles" which receives fairly heavy use form day hikers with trail use becoming lighter as it enters deeper into the wilderness", Ch 3-30. The use of the lighter equipment would also help minimize visual impacts to the already heavy impacted area around the dam (we refer you to the Comparison of Alternatives - Wilderness and Recreation, Table 2.1 on Ch 2-15).

Response:
Alternatives 3 and 4 utilize lighter construction equipment.

Alternative D, Ch 2-5, which proposed to reduce the elevation of the spillway was eliminated from detailed study. The main reasons this alternative was not considered was because the alternative would "not maintain irrigation water to dependent ranchers and agricultural lands" as well as "requiring the purchase of water rights for no longer available for irrigation". We question the extent of irrigation dependence of the spillway elevation being maintained. Please disclose within the final EIS what the difference in available irrigation water would be if the spillway was maintained at current levels or lowered sufficiently to achieve dam safety requirements with minimal work necessary. Also disclose any alternatives that may exist.

Response:
A lower elevation spillway would not eliminate the need to replace the rip rap, the outlet pipe, and the outlet structure. These are the two aspects of the repair work that require large construction equipment. The reservoir company

currently owns 3600 acre feet of stored water. Any reduction in the existing elevation of the spillway would reduce that amount accordingly.

Concerning the purchase of water rights no longer available for irrigation from reducing the elevation of the spillway, what would be the cost of this possibility? Please include this option and its inherent costs within your economic analysis as to its feasibility.

Response:
The purchase of water rights was not included as an alternative, because it is beyond the scope of the purpose and need for action. An important part of the purpose and need is the provision and maintenance of irrigation water.

If the elevation of the spillway was lowered, what would be the impact to the amount of water seasonally flowing through Bass Creak? Would the flow be sufficient to meet current irrigation needs without reducing flow levels below that necessary to maintain the aquatic/riparian ecosystem? Please disclose information which may indicate what conditions would be like if a spillway elevation lowering alternative was enacted. What is the amount of water currently used in comparison to that which would be available if the spillway was lowered? If irrigation needs could not be fully met under such a situation, an alternative which employs both spillway elevation reduction and purchasing of water rights for compensation of water no longer available for irrigation, should be considered.

Response:
A description of the aquatic and riparian ecosystems is included in Chapter 3. The reservoir storage and release of water in the stream acts to even out annual streamflow patterns, by reducing spring runoff amounts and by increasing later summer flows. If the spillway were lowered, spring runoff in the stream would increase; and later summer flows would decrease, because there would be less water available to release. During dry summers, all of the 3600 acre feet of water owned by the reservoir company is utilized for irrigation. With a lower spillway and reduced storage capacity, the dam owners would not have as much irrigation water available, especially during dry summers. Purchasing of water rights has not been addressed in this analysis, because the maintenance of current irrigation water use is an important aspect of the purpose and need for action. Heavy mechanized construction equipment would still be required to complete the rip rap facing on the dam, with a lower elevation spillway.

As proposed, we could not accept the chosen alternative (Alternative 2) as the best alternative in meeting the stated purpose and need as well as considering its impact upon the surrounding environment. We suggest addition to Alternative 2, which if incorporated, we could support:

1) If an alternative using heavy equipment is employed, the work be conducted in a manner which (to the extent possible) would make this disturbance a "one shot deal" with future construction and disturbance of the area unnecessary.

Response:
Alternative 2 would complete all necessary reconstruction work in one season. Alternative 3 and 4 require 3-5 year maintenance work with helicopters and other motorized equipment. In 20-25 years, the larger construction equipment

would be needed to replace the concrete inlet structure with Alternatives 3 and 4.

2) Rehabilitation: We suggest consideration of a rehabilitation proposal which would not only rehabilitate the road used for walking in the heavy equipment, but one which incorporates the best rehabilitation possible of the surrounding dam site from impacts on both the proposed action as well as previous disturbances. Road rehabilitation should occur from the dam site to the trail head instead of the wilderness boundary. All rehabilitation plans should be incorporated in detail in future documentation and intended to occur as soon as possible with guaranteed funding. This may increase the overall cost of the project as well as the total time involved, but is necessary in compensation for environmental costs of impacts incurred during past and proposed construction activities.

Response:
A Rehabilitation Plan for the trail has been completed. Objectives and components of the plan have been shared with the commentator. The rehabilitation will occur over the entire length of the trail and on the old road where it is separate from the trail. The Bass Lake Reservoir Company and the Forest Service will be responsible for completing specific aspects of the plan. Rehabilitation will begin with implementation of the project in September, 1996, and will continue into 1997.

3) Contingency Plans: Plans should be designed and incorporated within future documents concerning actions which would be taken in the event of an accident (i.e. fuel spill). Measures needed to protect the surrounding ecosystem in the case of such an event should be fully documented.

Response:
Contingency plans for emergencies are included in the Air Operations, Safety, Materials Handling and Storage Plan. This plan addresses radio communications, medical evacuations, flight paths and hazards, and the transportation and storage of hazardous materials, including fuel spills.

We are concerned that if Alternative 2 is enacted, it will be seen as a model for future dam reconstruction projects which are bound to arise with the other dams within the wilderness area. Under no means is the Bass Dam Reconstruction project to be viewed as a template for future projects. We insist that any and all future dam reconstruction projects be viewed independently with specific consideration to the unique features within the project area.

Response:
All future dam reconstruction projects will be addressed on a case-by-case basis and will be subject to a site specific environmental analysis, as required by the Forest Plan, Region One Wilderness Dams Policy, (FSM 2322.03), and the National Environmental Policy Act (NEPA).

Cumulative Effects: We believe that if you take a good hard look at the significance of impacts of all past, presently ongoing, and reasonably foreseeable proposed and future activities, additional impacts from the proposed project may be too adverse on some resources. Cumulative effects are define by NEPA at 40 C.F.R. 1508.7 as:

... the impact on the action on the environment which results from the incremental impact of the action when added to other past, present, or reasonable foreseeable future action regardless of what agency (Federal or non-Federal) or person undertakes such other action. Cumulative impacts can result from individually minor but collectively significant actions taking place over a period of time (emphasis added).

This action should be analyzed as if its effects are additive with those past actions. This proposed action would be implemented in an area that has been heavily impacted from past construction.

In deliberating on which alternative action should be enacted, the least impactive alternative should receive ample consideration when the area's past history is fully taken into account. We insist that the cumulative impacts be fully addressed since the area receiving the most potential impact from this proposal falls within the Selway Bitterroot Wilderness Area. Reviewing the four proposed actions considered in detail, the permittee's proposal (Alternative 2) has the highest overall possible negative effects as indicated in Table 2.1, Ch 2-15. We are concerned that less destructive alternatives are not proposed within a wilderness area.

Response
Cumulative effects and connected actions are discussed in Chapter 4. These activities have been considered. Alternatives 3 and 4 require repeated disturbances in the wilderness every 3-5 years to complete concrete maintenance at the dam site. These are also cumulative effects that have been considered. We believe that the repeated impacts from the maintenance program over a 20-25 year period are more significant and will result in effects to wilderness lasting beyond the direct effects from Alternative 2. Alternative 2 will allow for a period of recovery and rehabilitation of shorter duration than Alternatives 3 and 4.

Forest Plan Standards/Goals: To be consistent with Bitterroot National Forest Plan goals for the Selway Bitterroot Wilderness (Forest Plan, 1987, and Amendment #7, 1992), "the integrity of the wilderness resource is to be preserved to meet the purposes described in the Wilderness Act; to protect and preserve natural conditions so that the wilderness generally appears to have been affected primarily by the forces of nature, with the imprint of human work substantially unnoticeable, and has outstanding opportunities for solitude or primitive and unconfined recreation. Applications of a Prevention of Significant Deterioration (PSD) approach to prevent a net degradation of the wilderness resource, while acknowledging that wilderness and the impacts caused therein are dynamic", Ch 4-19 (emphasis added). Considering the current degraded state of the area surrounding Bass Dam, we insist that these less impactive measures for achieving dam safety compliance employed.

We also note that "Motorized equipment or other non-conforming activities will be authorized when it can be demonstrated that: 1) it is the only feasible means of accomplishing the necessary maintenance and 2) the continued existence of the reservoir is more in the public interest than its breaching (Ch 4-19)." We do not believe that either of these two aspects have been sufficiently demonstrated and request further study of alternatives. As previously noted, it is stated on Ch2-5 that the proposed action is not the only feasible means of compliance.

Response:
Forest Plan Direction has been followed in the development of alternatives and in the selection of Alternative 2. Forest Plan guidance for dams within the Selway-Bitterroot Wilderness is documented in Chapter 4, Wilderness. As stated earlier, Alternatives 3 and 4 are also capable of meeting the purpose and need for action, but they require additional entries and disturbances to wilderness and other resources. All alternatives employ minimum tools and mitigation measures to protect wilderness and other resources.

We request that these issues be fully considered before finalization of your EIS. If you or anyone on your analysis teams have any questions about any of the issues we've identified in this letter, please let us know. Also, please keep us on the NEPA list for all future mailings on this project.

The Ecology Center, Inc.

Thank you for the opportunity to meet with you and discuss our concerns regarding the Proposed Bass Lake Dam Reconstruction Project this past Wednesdau, July 26. In response to the notice we were given during our meeting entitled, Changes to the Proposed Action (Alternative 2) Bass Lake Dam Reconstruction, I am submitting further comments on behalf of the Ecology Center and the Alliance for the Wild Rockies.

Change#1": As indicated within this notice of changes, it is stated that, "After discussion with Kerry McMenus on 7/25, it was determined that these changes are not significant, and can be addressed in the FEIS." As we discussed, we are not convinced that the changes which would be required for change #1 would be significant in terms of the overall impact and the extent of the work required. This alternative requires a "heavier version of the PE pipe fusion machine" which would be "transported to the dam on a trailer that is pulled by a 4WD rubber tired farm tractor." The alternative exists that this machinery could be flown in by a heavy lift helicopter but, as discussed in our meeting, seems an unlikely alternative.

As indicated in our discussion, several potential difficulties in transporting the pipe fusion machine exist by trailer transport. Questions remain unanswered as to:

1) The clearance of the trailer in respect to the amount of necessary road disturbance.
2) Safety in transporting this equipment along steeper areas.
3) The amount of road reconstruction that would be necessary in order to attain a road surface which could transport this equipment safely. We are assuming that a rubber tired trailer with two axles will need a higher quality road surface than if all machinery was walked in as proposed in the original action.
4) What alternatives exist in getting the pipe fusion machine to the site?

Response:
The trailer that will transport the pipe fusion machine will be modified and fitted with larger wheels and tires so that no additional improvements, beyond the trail clearing needed for the excavator and loader, will be needed to pull

it safely. If a helicopter with the necessary capacity is available locally, it could be used to transport it.

With the potential problems which were raised regarding transporting this machine, we were left with a feeling that it is unsure as to how this equipment could be taken safely, having the least possible impact, to the dam site. Please include detailed transportation plans in the FEIS.

Response:
Plans for transporting the equipment to the site are included in Chapters 1 and 2.

If indeed this action would prove to be unacceptably impactive, could the time of year for construction be altered slightly to decrease the potential for cold weather. This was the main indicated factor that the original, lighter weight fusion machine, which could be flown in, could not be used.

Response:
It is the intent of the Reservoir Company to implement the project as soon as low water allows, beginning in late August or early September.

As I briefly mentioned to you on Wednesday, a Forest Service employee has devised a less impactive and more easily rehabilitative method of road construction which could be employed for any sections where more impactive road reconstruction measures may need to occur. This may be applicable if a higher quality road is needed for the transport of the heavier fusion machine. We urge you to contact Skip Hegman at the Missoula Ranger Station in regard to his "road roll up" method, if a higher degree of road reconstruction is needed.

Response:
A higher degree of road reconstruction is not anticipated with the trailer mounted pipe fusion machine.

Change #2: In regard to the 500 gallon diesel fuel tank to be stationed at the south side of the dam site and refueled via helicopter every other day, this only strengthens our desire to see detailed contingency plans for the possibility of an accidental fuel spill or helicopter accident incorporated within the FEIS.

Response:
A detailed plan, with contingency measures for fuel spills and emergencies, has been completed and is available in the project file. Land and Water Consulting Inc. has been hired by the Reservoir Company and has provided a plan for petroleum spill prevention, emergency spill responses, and for spill rehabilitation (Project File).

As indicated in the notice of these changes distributed during our meeting, these changes will be addressed within the FEIS. Since the construction project will inevitably not occur this season, we urge you to take your time in examining these potential problems and concerns and thoroughly document your findings concerning the potential effects from these changes in the FEIS.

We request that these issues be fully considered before finalization of your EIS. If you or anyone on your analysis teams have any questions about any of

the issues we've identified in this letter concerning these changes, please let us know. Also please keep us on the NEPA list for all future mailings on this project.

Stevensville Feed & Fuel
Bob Popham

I have read and studied the Draft EIS for the proposed Bass Dam Reconstruction Project.

I am definitely in favor of the Preferred Alternative "B". It makes a lot more sense to walk the equipment to the job do it right and have it last 40-50 years, rather than flying smaller equipment in every 5 years to do a "patch" job. Having cleared the way for heavy equipment to walk to the project, it should be considered to have supplies taken into the project with heavy 4-wheel drive trucks. There should be minor costs to this and little effect on the area. It would also allow for quick response to the dam in case of emergency. There are several things to consider on this project, some of which are:

1.) The Dam was built well before the area was a Wilderness Area and to my understanding before the existence of the U.S. Forest Service. The Dam has been in continuous use and should have some "right in time".

2.) The economic effect of the Dam is tremendous. Not only the ranchers in the area benefit, but also the economic and recreational stimulus to the community as a whole would be sustained. The mid to late summer stream flows are enhanced by the lake.

3.) The cost of the project needs to be kept in check and still meet the needs of the Reservoir users with an acceptable effect on the surrounding area.

Response:
These comments were considered in the completion of the FEIS

Considering the track record of the Reservoir users (Land Stewardship Award, working relationship with Fish and Game, etc.) the project is in good hands.

Thank you for the opportunity to comment

United States Environmental Protection Agency

1. It is stated on page 2-13 that Alternative 4 would be shorter in duration than Alternative 3 and that duration would be 6-8 weeks. On page 2-14 it says duration for Alternative 4 would be 4-5 weeks. Please clarify the duration of Alternative 4.

Response:
The duration of Alternative 4 is 4-5 weeks. To be consistent throughout the document, the duration of the Alternatives has been changed to days: 25 days for Alternative 2; 50 days for Alternative 3; and 35 days for Alternative 4.

2. There was little discussion in the DIES regarding the impacts associated with the different durations of time to carry out and complete the work between alternatives (i.e., 3-4 weeks, 4-5 weeks, 6-8 weeks). Such work duration impacts should be further described and compared among alternatives

Response:
Total estimated duration of the effects of each alternative to wilderness values is described in Chapter IV. Wilderness issues are most affected by the duration of the work activities. The short operating season at the elevation of the dam and the limited access options is also a consideration. An expanded description of these effects is included in the FEIS.

3. It is stated in the ABSTRACT AND SUMMARY that for Alternatives 2 and 3, all access of lighter equipment, supplies and personnel to the work site would be with helicopters. Yet it is stated in Chapter 2 (pages 2-11, 12) that for Alternative 3 personnel, supplies, and lighter equipment pounds would be brought in to the work site with packstock. It is our understanding, therefore, based on the information in Chapter 2 that packstock's are only proposed for Alternative 3, but this conflicts with the information in the ABSTRACT. Proposed helicopter transport vs. packstock transport should be clarified for Alternative 3 (i.e., need consistent alternatives descriptions between ABSTRACT and Chapter 2).

Response:
The ABSTRACT and SUMMARY has been changed to be consistent with Chapter 2. The use of packstock for lighter equipment and supplies is proposed only in Alternative 3 in the FEIS

4. The method and route and degree of disturbance associated with the equipment access (i.e., use of old road and trail) provides an important distinguishing difference between alternatives. It is stated that for Alternative 2 the road would have to be widened in locations within a 1200 foot section that has been filled in with rock slides, and clearing would be required along the remainder of the route. It is stated that for Alternative 4 the trail would have to be widened in places along the 1200 foot section that has sloughed in, although not to the degree as in Alternative 2, because the equipment is smaller and narrower. Alternative 3 would involve no disturbance to the road/trail beyond that produced by the pack trains (which are noted in Chapter 2 but not in ABSTRACT).

More detailed information should be provided regarding the specific impacts and disturbances to the road and trail associated with equipment access among alternatives to provide an improved basis upon which to evaluate and choose among alternatives.

Response:
Additional descriptions of the effects of the alternatives to the trail have been added to Chapter 4 under Trails/Recreation. The disturbance to the trail with Alternatives 2 and 4 will be primarily to vegetation. This will affect the visual appearance of the trail for several years.

The FEIS should include an enlarged map showing the old road and Bass Creek Trail the heavy equipment would have to take, particularly the proximity of the road to the creek, the specific characteristics at the 1200 foot section where

the old road would have to be widened in Alternative 2 vs. Alternative 4, and the stream crossings. Photographs of the old road at trail at the stream crossings and locations where the road would have to be widened, and more detailed and descriptive narrative discussions of the access route disturbances, focusing on environmentally sensitive areas would be helpful.

Response:
The effects of the alternatives on the trail and stream are disclosed in Chapter 4 in the Recreation/Trails, Watershed, and Visual Quality sections. A Trail Rehabilitation Plan has been completed and is included in the Appendix. This plan includes a map, aerial photos, oblique photos, and a videotape for describing the existing condition of the trail, and planned restoration.

5. It is stated (page 4-3) that for Alternative 2 the excavator will be used to rehabilitate the trail and install waterbars. We would expect that trail rehabilitation and installation of waterbars would also be included in Alternative 4, but this is not explicitly stated. Would you please clarify whether road/trail rehabilitation and waterbar installation is included in Alternative 4. We believe road and trail rehabilitation, waterbar installation, and revegetation should be incorporated into both alternatives where use of the road/trail is proposed (i.e., Alternatives 2 and 4).

Response:
Trail rehabilitation is planned with the smaller excavator in Alternative 4 also, and this has been added to the watershed section of Chapter 4. The rehabilitation plans are also discussed in Chapter 2 as a mitigation measure common to all alternatives.

More detailed discussion of road/trail rehabilitation and revegetation measures between Alternatives 2 and 4 are needed to better clarify and distinguish between these alternatives. Further information on proposed road/trail rehabilitation and revegetation measures will also provide the reader with a greater assurance that the road/trail disturbances of Alternatives 2 and 4 have been completely displayed, and that proposed disturbances occur will be completely reclaimed and revegetated.

Response:
More detailed discussion of the rehabilitation strategies and differences between Alternatives 2 and 4 has been added to the Recreation/Trails section of Chapter 4.

6. The DEIS also does not adequately describe activities and impacts associated with the concrete maintenance program which will be required for Alternatives 3 and 4 to patch and seal the old concrete. It is stated (page 2-13) that concrete maintenance will require use of motorized pumps and installation of a smaller cofferdam to pump dry the concrete area to be maintained, and use of helicopters to transport the pumps and cofferdam materials. What will the impacts of these repeated (i.e., 3-5 year interval intrusions into the Wilderness Area be?

Response:
Information about the maintenance activities and the anticipated effects of the concrete maintenance has been added to Chapter 4.

7. The DEIS also does not adequately describe activities and impacts associated with replacement of the inlet pipes and concrete housing in 20-25 years that is stated to be required for Alternatives 3 and 4, but presumably not for Alternative 2. What is the life expectancy of these features with Alternative 2? If the life expectancy of these features is significantly longer with Alternative 2 than Alternatives 3 and 4, it would appear to increase the relative merits of Alternative 2.

Response:
The anticipated effects of the inlet replacement project in 20-25 years are disclosed as a connected action in Alternatives 3 and 4 and have been added to the introduction section of Chapter 4. The life expectancy of the new inlet structure in Alternative 2 is 50 years, and this has been added to the description of the proposed action in Chapter 1.

It may be that one larger and more disturbing intrusion into the Wilderness to do the job completely and permanently (i.e., Alternative 2) may be more attractive than a less disturbing intrusion that does not accomplish the job completely and necessitates repeated intrusions into the Wilderness Area (i.e. Alternatives 3 and 4). The DEIS does not adequately describe and compare the impacts of one larger more disturbing intrusion compare the impacts of one larger more disturbing but more frequent intrusions (i.e., Alternative 2) vs. the less disturbing but more frequent intrusions (i.e., Alternatives 3 and 4) that are necessitated by the concrete maintenance program and the lower life expectancy of the inlet pipes and concrete housing.

Response:
More information comparing the anticipated effects of the maintenance and future inlet replacement work has been added to Alternatives 3 and 4 in Chapter 4. This comparison is also fully discussed in the Record of Decision.

8. There was little discussion in the DEIS regarding the impacts of the work camp (e.g., waste disposal, fuel storage, waste oil disposal, etc.). Such impacts should be further described and compared among alternatives.

Response:
A description of the camp and storage areas for each alternative is included in the Alternative Descriptions in Chapter 2. Additional discussion of the effects of the camp and storage areas is added to Chapter 4 under Wilderness, Trails, and Recreation.

9. The Forest Service should review and evaluate the tabulation of project costs for the action alternatives on pages 4-17 and 4-18 to be sure they are truly representative of the probable costs of carrying out each alternative. We observed that the cost tabulations do not show identical cost categories between alternatives. For example, heavy equipment hours are included with Alternative 2, but not with Alternatives 3 and 4; labor hours are separately itemized for Alternative 2, but not for Alternatives 3 and 4. Also, some cost items which we would expect do not appear to be shown. These include; the extra cost in Alternative 2 for widening and upgrading the road, and in Alternative 2 for widening and upgrading the road, and adequately rehabilitating and revegetating the road after work was completed, and installing waterbars at project completion; the extra cost of labor and equipment hours for the longer duration Alternative 4, and even longer duration

Alternative 3; the cost of the concrete maintenance program every 3-5 years and needed replacement of the inlet pipes and concrete casing n 20-25 years for Alternatives 3 and 4.

Response:
Cost categories have been revised and are now consistent between alternatives. The costs associated with work needed to provide safe passage of the equipment over the trail in Alternatives 2 and 4 have been added. Also, the trail rehabilitation costs have been added to Alternatives 2 and 4.

10. The statement is made on page 4-3 that, "dam reconstruction and trail access will not disturb any wetlands not already affected years ago by dam construction, operation, and access." We note that placement of fill in waters of the United states, including wetlands, that may be necessary for the dam reconstruction will likely need to receive authorization from the U.S. Army Corps of Engineers under Section 404 of the Clean Water Act.

We recommend that you contact the U.S. Army Corps of Engineers (Mr. Bob McInerney in Helena Office at 444-6670) regarding this project. We also recommend preparation of a preliminary 404 (b) (1) evaluation for the proposed dredge and fill activities. The 404 (b) (1) evaluation among other things will evaluate proposed dredge and fill activities associated with dam reconstruction to assure that the " least damaging practicable alternative" from a 404 permit perspective is selected.

Preparation of a preliminary 404 (b) (1) evaluation helps to avoid project delays by better assuring that the Forest Service's preferred alternative may receive a 404 permit from the Corps of Engineers. The preliminary 404 (b) (1) evaluation for a project is often appended to the EIS. We also note that the CEQ regulations encourage cooperative efforts and integrating requirements of NEPA with other environmental review procedures to assure that such procedures are consistent and run concurrently rather than consecutively. Also, in accordance with the CEQ NEPA regulations 40 CFR 1502.25 the DEIS should list all Federal permits and licenses which must be obtained to implement the proposal (such as the 404 permit).

It may also be helpful and avoid delays to make contacts with other permitting agencies and to list other permits that may be necessary to implement the project, such as a 310 permit from the Bitterroot Conservation District, and Water Quality Standards turbidity exemption (3(a) authorization) and construction stormwater permit from the State Water Quality Division.

Response:
The reservoir company has been informed of the permits needed to implement the reconstruction work. Consultation with the Corps of Engineers and the Montana Department of Natural Resources and Conservation, for determining permit requirements, has been initiated. All required permits are listed in Chapter 1.

11. There was very little discussion in the DEIS regarding potential project trade-offs associated with water conservation and improved irrigation water management by the Bass Lake Reservoir Company irrigators to reduce irrigation water use vs. reservoir storage capacity. Are there any practical opportunities to reduce the size and scope of the project in association with

improved water conservation and irrigation water management? What is being done to monitor irrigation water use and management, and to assure that efficient irrigation water management methods are being used?

Response:
The Bass Lake Reservoir Company has water rights for 3,600 acre feet of storage under Montana State Law. The use and conservation methods of the adjudicated water is beyond the scope of the purpose and need identified in Chapter 1. The company has not proposed any change in storage capacity or use for the water. If storage capacity were reduced, the reconstruction work would be still be required to meet safety requirements under Federal law, for handling flood waters associated with storm events.

United States Department of the Interior

The Department of the Interior has reviewed the Draft Environmental Impact Statement for the Bass Lake Dam Reconstruction, Bitterroot National Forest, Ravalli County, Montana and has no comments.

Grassroots For Multiple Use

The Draft Environmental Impact Statement concerning the Bass Lake Dam Reconstruction has been reviewed and discussed by the Grassroots for Multiple Use Board of Directors.

We find that every possible contingency has been adequately considered and we offer firm support for the proposed action, which we understand was the proposal of the Bass Lake Reservoir Company.

There are certain comments which we would like to reiterate. The emphasis given to protection of wilderness values discriminates against the prior uses and users, as at the time the Wilderness Act of 1964 was passed permanent works of man had dominated the area for years and years.

The attempt to narrow the road tread, as the equipment is removed, is an unneeded expense, and destroys an asset that would be beneficial in case of emergencies. It would be a benefit to equestrians who would prefer to ride abreast, also, would limit the amount of disturbance to soil and vegetations.

Response:
Tread width and clearing standards for trails by Opportunity Class are established in the Forest Plan, Amendment #7, General Management Direction for the Selway-Bitterroot Wilderness (1992). Emergency access will not be changed from current conditions with the implementation of Alternative 2.

We would like to suggest limiting the use of helicopters and broadcasting grass seed prior to moving the equipment out and let nature take its course.

Response:
An alternative (B, Chapter 2) was considered that did not rely on helicopter transportation for accessing the project site. This alternative was eliminated from detailed consideration because of the amount of ground disturbance and resource effects that the reconstruction of the Bass Creek trail would cause

within the Selway-Bitterroot Wilderness and its incompatibility with wilderness goals and standards.

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